BEISLER
NÄHAUTOMATION
ADVANCED SEWING EQUIPMENT

100/68

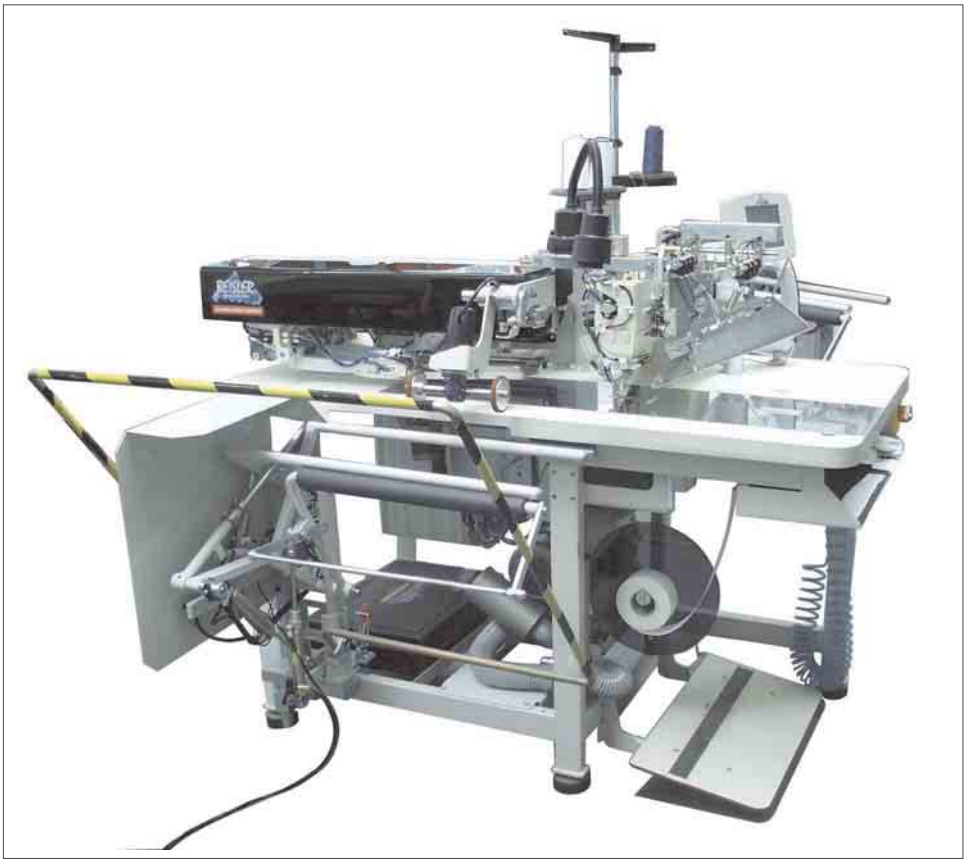
Universal
Piped-Pocket-Sewing unit

Operating instructions 1

Assembly instructions 2

Service instructions 3

Programming instructions 4



Ausgabe / Edition: 11/2007 Printed in Federal Republic of Germany Teile-Nr.:/Part-No.:DOC000045

Foreword

This instruction manual is intended to help the user to become familiar with the machine and take advantage of its application possibilities in accordance with the recommendations.

The instruction manual contains important information on how to operate the machine securely, properly and economically. Observation of the instructions eliminates danger, reduces costs for repair and down-times, and increases the reliability and ute of the machine.

The instruction manual is intended to complement existing national accident prevention and environment protection regulations.

The instruction manual must always be available at the machine/sewing unit.

The instruction manual must be read and applied by any person that is authorized to work on the machine/sewing unit. This means:

Operation, including equipping, troubleshooting during the work cycle, removing of fabric waste,

- Service (maintenance, inspection, repair) and/or
- Transport.

The user also has to assure that only authorized personnel work on the machine.

The user is obliged to check the machine at least once per shift for apparent damages and to immediatly report any changes (including the performance in service), which impair the safety.

The user company must ensure that the machine is only operated in perfect working order.

Never remove or disable any safety devices.

If safety devices need to be removed for equipping, repairing or maintaining, the safety devices must be remounted directly after completion of the maintenance and repair work.

Unauthorized modification of the machine rules out liability of the manufacturer for damage resulting from this.

Observe all safety and danger recommendations on the machine/unit! The yellow-and-black striped surfaces designate permanend danger areas, eg danger of squashing, cutting, shearing or collision.

Besides the recommendations in this instruction manual also observe the general safety and accident prevention regulations!

General safety instructions

The non-observance ot the following satety instructions can cause bodily injuries or damages to the machine.

1. The machine must only be commissioned in full knowledge of the instruction book and operated by persons with appropriate training.

2. Before putting into service also read the safety rules and instructions of the motor supplier.

3. The machine must be used only for the purpose intended. Use of the machine without the safety devices is not permitted. Observe all the relevant safety regulations.

4. When gauge parts are exchanged (e.g. needle, presser foot, needle plate, feed dog and bobbin) when threading, when the workplace is left, and during service work, the machine must be disconnected from the mains by switching off the master switch or disconnecting the mains plug.

5. Daily servicing work must be carried out only by appropriately trained persons.

6. Repairs, conversion and special maintenance work must only be carried out by technicians or persons with appropriate training.

7. For service or repair work on pneumatic systems, disconnect the machine from the compressed air supply system (max. 7-10 bar). Before disconnecting, reduce the pressure of the maintenance unit.
   Exceptions to this are only adjustments and functions checks made by appropriately trained technicians.

8. Work on the electrical equipment must be carried out only by electricians or appropriately trained persons.

9. Work on parts and systems under electric current is not permitted, except as specified in regulations DIN VDE 0105.

10. Conversion or changes to the machine must be authorized by us and made only in adherence to all safety regulations.

11. For repairs, only replacement parts approved by us must be used.

12. Commissioning of the sewing head is prohibited until such time as the entire sewing unit is found to comply with EC directives.

It is absolutely necessary to to respect
the safety instructions marked by these signs.

Danger of bodily injuries !

Please note also the general safty instructions.

Index **Page:**

Part 1: Operating instructions 100/68

1. Description of product . . . 3
1.1 Description of proper use . . . 3
1.2 Brief description . . . 3
1.3 Technical data . . . 4

2. Operating . . . 5
2.1 Swivelling the folding station aside . . . 5
2.2 Removing the fabric sliding sheet . . . 6
2.3 Needles and threads . . . 7
2.4 Threading the needle thread . . . 9
2.5 Winding up the hook thread . . . 10
2.6 Remaining thread monitor . . . 11
2.7 Slanted pocket opening (optional) . . . 12
2.7.1 Swivelling the corner knife station in and out . . . 12

3. Switching on - Starting the sewing process - Program stop - Switching off . . . 14
3.1 Switching on . . . 14
3.2 Reference position . . . 15
3.3 Starting the sewing process . . . 15
3.4 Program stop . . . 16
3.5 Switching off . . . 16

4. Working methods . . . 17
4.1 Working method “Production of trousers” . . . 18
4.2 Working method “Breast welt pocket” . . . 20

5. Quick clamp adjustment and folder monitoring . . . 22
6. Function and operation of the optional equipment . . . 23
6.1 Tape feeding unit with automatic trimming and tape monitor . . . 23
6.2 Endless zipper device . . . 26

7. Maintenance . . . 27
7.1 Cleaning . . . 27
7.2 Oil level control . . . 28

1. Description of product

1.1 Description of proper use

The Beisler 100/68 is a sewing unit which can properly be used for sewing light to medium-weight material. Such material is, as a rule, made of textile fibres or leather. These materials are used in the garment industry.

In general only dry material must be sewn on this machine. The material must not contain any hard objects.

The seam is generally made with core thread, polyester fibre or cotton threads.
The dimensions for needle and hook threads can be taken from the table in chapter 2.4.

Before using any other threads it is necessary to estimate the consequential dangers and to take the respective safety measures, if required.

This sewing unit must only be installed and operated in dry and well-kept rooms. If the sewing unit is used in other rooms, which are not dry and well-kept, further measures to be agreed upon may become necessary (see EN 60204-31 : 1999).

We, as manufacturer of industrial sewing machines, assume that at least semi-skilled operating personnel will be working on our products so that all usual operations and, where applicable, their risks are presumed to be known.

1.2 Brief description

The **Beisler 100/68** is a sewing unit for automated runstitching of piped pocket, flap pocket and welt pocket openings with rectangular or slanted pocket corners.

The slanted pocket corners result from the offset of the two seam rows. It is possible to sew different slants at the seam beginning and at the seam end.

Depending on the working method various feeding devices, corner knife stations and optional equipment are used.

Machine head

- Twin needle lockstitch version
- Needle bars can be switched/engaged jointly or separately
- Vertical hook
- Externally driven centre knife, speed and release time/switching time programmable
- Thread trimming device for needle and hook threads
- Monitor for the needle threads
- Photoelectric remaining thread monitor for the hook threads
- DC direct sewing drive

Step motors for the material feed and the length adjustment of the corner trimming device

The step motor technology allows short machine times and guarantees an absolutely precise material feed and accurate corner incisions.

Thus, it contributes to a pocket quality unrivalled as yet combined with high productivity.

New control generation “DAC III”

The graphic user guidance is exclusively effected by internationally comprehensible symbols and texts in the language of the respective country.
The various symbols are arranged in groups within the menu structure of the sewing and test programs.
The easy operation allows short training times.

20 storage locations with each 6 seam programs are available. Thus it is possible to generate and store up to 6 different seam programs per storage location.
6 seam programs can be allocated to every storage location in any desired order which can be sewn in succession.

All slants to be processed can be programmed by the operator via parameters.

The comprehensive test and monitoring system **MULTITEST** is integrated in the DAC.
A microcomputer does the control tasks, supervises the sewing process and indicates operating errors and malfunctions in the display.

Optional equipment

Due to a flexible system of optional equipment the sewing unit can be optimally adapted to the respective application at low cost.

Sewing equipment and folders

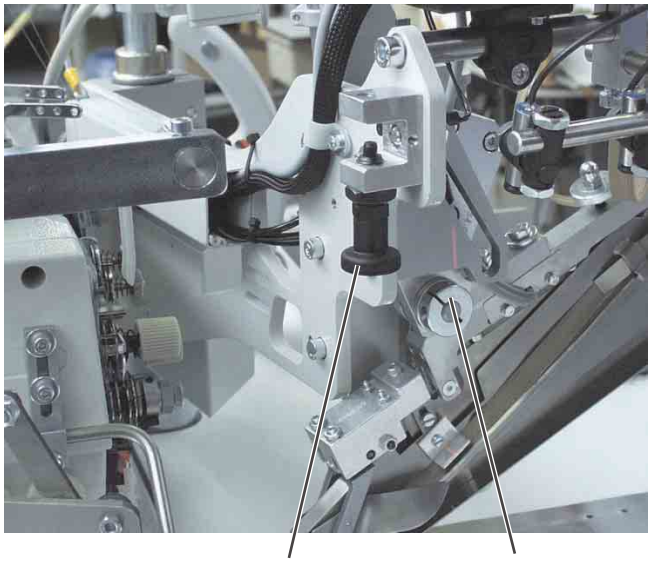
Please see parts list of cl. 100/68 for details concerning sewing equipment and folders for the various applications or contact the Beisler company.

1.3 Technical data

Needle system:	2134-35
Needle distance:	8, 10, 12, 14, 16, 20, 22, 24, 26, 30 mm
Needle size:	Nm 80 to Nm110
Threads:	see table chapter 2.3
Stitch type:	twin needle lockstitch
Speed:	max. 3,000 r/ min
Stitch length:	min. 0.5 to 3.0 mm
Number of condensed stitches:	1 - 20
Number of bartack stitches:	0 - 20
Stitch length condensed stitches/ bartacks	0.5 - 3.0 mm
Pocket length:	max. 250mm
Operating pressure:	6 bar
Air consumption:	approx. 6 NL per working cycle
Rated voltage:	1 x 230 V / 50/60 Hz
Dimensions:	1750 x 1450 x 1700 mm (L x W x H)
Working height:	830 mm (upper table top edge)
Weight:	270 kg

2. Operating

2.1 Swivelling the folding station aside

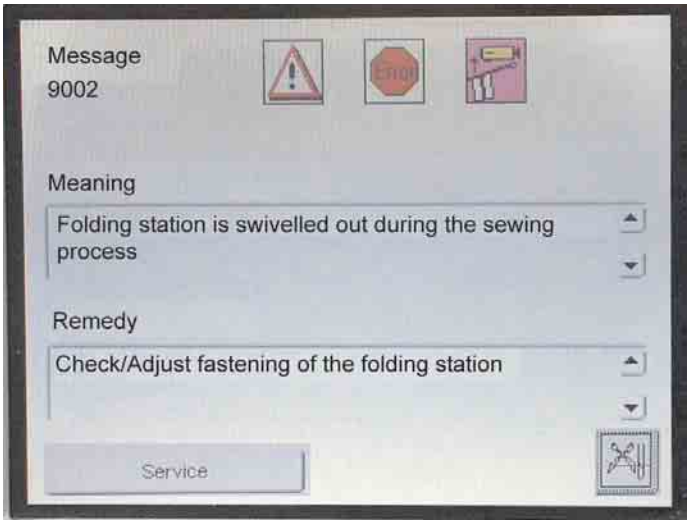


For work at the sewing point (threading the needle threads, needle change etc.) the entire folding station with folder and laser lamps can be swivelled to the right.

– Swivel the entire folding station 1 with folder to the right.
  The sewing point is freely accessible.

Note:

When the sewing unit is switched on a
safety message is indicated in the display of the control panel.



Swivelling the folding station back

– Swivel the folding station 1 back.

ATTENTION !

After having been swivelled back the folding station must snap in catch 2.

2.2 Removing the fabric sliding sheet

Caution: Risk of injury!
Switch the main switch off.
Remove the fabric sliding sheet only with the sewing unit switched off.

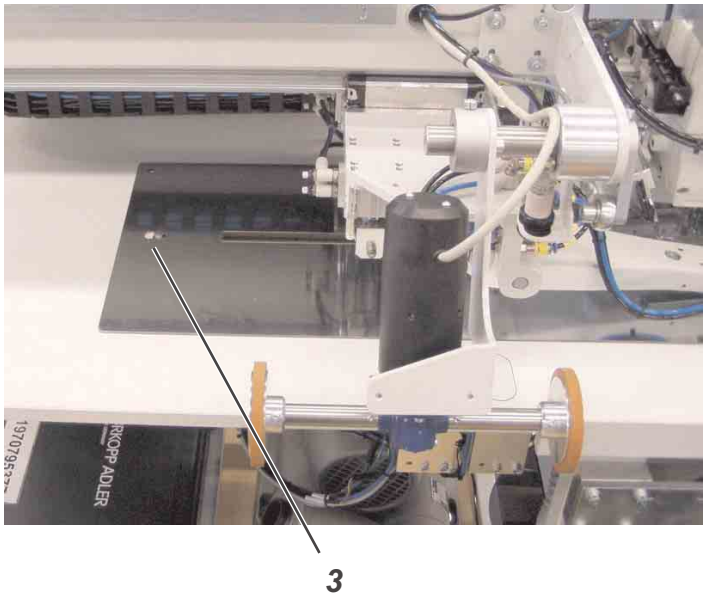
– Switch the main switch off

For changing the hook thread bobbins:

– Lift the fabric sliding sheet 2 at/with the pin 1 and swivel it to the left.

For complete removing (for maintenance work and adjustments):

– Lift the fabric sliding sheet at the hind pin 3c completely.



2.3 Needles and threads

Needle system: 2134-85

Recommended needle size:
Nm 90 for thin material
Nm 100 for medium-weight material
Nm 110 for heavy-weight material

High sewing security and good sewability are achieved with the following
core threads:

- Two-ply polyester endless polyester core-spun (e.g. Epic Poly-Poly, Rasant x, Saba C, ...)
- Two-ply polyester endless cotton core-spun (e.g. Frikka, Koban, Rasant, ...)

If these threads are not available, the polyester fibre or cotton threads listed in the table can also be sewn.

Often two-ply core threads are offered by the thread manufacturers with the same designation as three-ply polyester fibre threads (3cyl.-spun).This causes uncertainty with regard to twisting and thread thickness.

When in doubt, unravel the thread and check whether it is twisted 2- or 3-ply.
The label no. 120 on the thread reel of a core thread corresponds e.g. to the thread size Nm 80/2 (see table values in brackets).

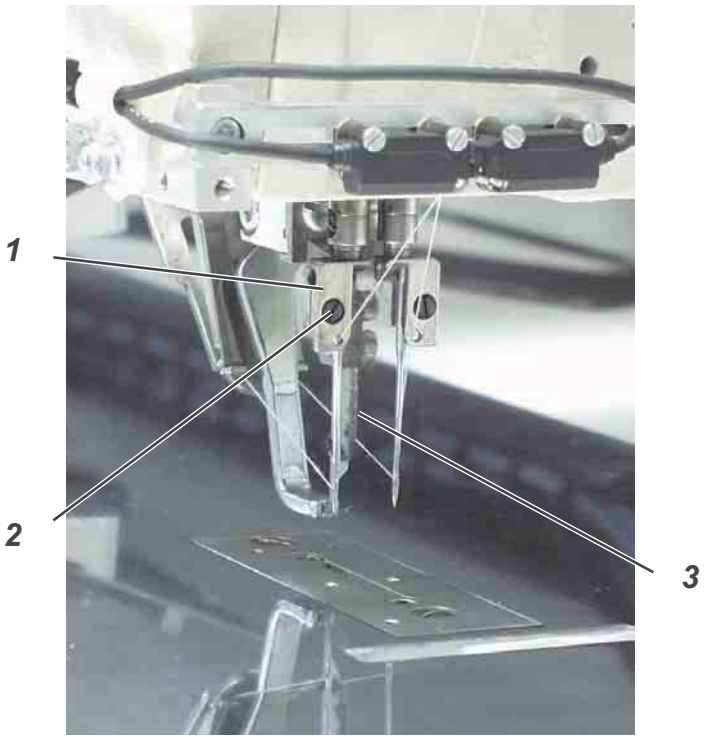
In case of monofilament threads you can use needle threads and hook threads of the same thickness. The best results are achieved with soft and elastic threads (software) of the thread thickness 130 Denier.

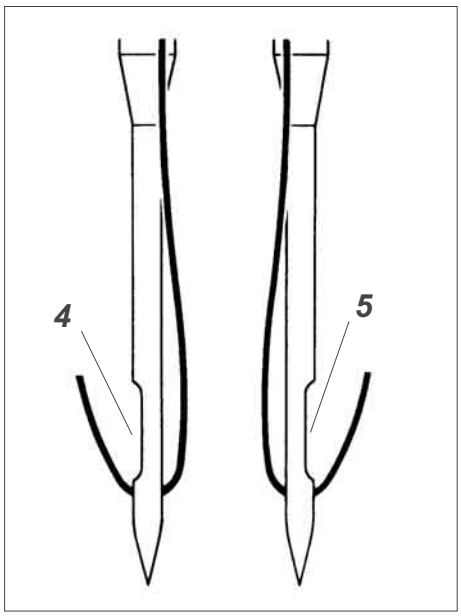
Recommended thread thicknesses:

Needle size Nm	Core thread		Core thread	
	Needle thread	Hook thread	Needle thread	Hook thread
	Polyester endless Label No.	Polyester core-spun Label No.	Polyester endless Label No.	Cotton core-spun Label No.
90	120 (Nm 80/2)	120 (Nm 80/2)	120 (Nm 80/2)	120 (Nm 80/2)
100	100 (Nm 65/2)	100 (Nm 65/2)	100 (Nm 65/2)	100 (Nm 65/2)
110	75 (Nm 50/2)	75 (Nm 50/2)	75 (Nm 50/2)	75 (Nm 50/2)

Needle size Nm	Polyester fibre thre-ad (3cyl.-spun)		Cotton thread	
	Needle thread	Hook thread	Needle thread	Hook thread
90	Nm 80/3-120/3	Nm 80/3-120/3	Ne_B 50/3-70/3	Ne_B 50/3-70/3
100	Nm 70/3-100/3	Nm 70/3-100/3	Ne_B 40/3-60/3	Ne_B 40/3-60/3
110	Nm 50/3-80/3	Nm 50/3-80/3	Ne_B 40/4-60/4	Ne_B 40/4-60/4

Needle change





Caution: Risk of injury!

Switch the main switch off.
Change the needles only when the main switch is switched off.

Risk of cuts!

Do not reach into the area of the centre knife 3 when changing the needles.

- Swivel the folding station aside (see chapter 2.1)
  The needles are freely accessible.
- Loosen screw 2 and remove needle from needle holder 1.
- Push a new needle into the drill-hole of needle holder 1 as far as it will go.
  ATTENTION!
  Seen from the operator's side of the sewing unit the hollow groove 4 of the left needle must point to the left and the hollow groove 5 of the right neele to the right (see sketch).
- Tighten screw 2.

ATTENTION!

After the changeover to another needle size the needle protection at the hook has to be readjusted (see service instructions).

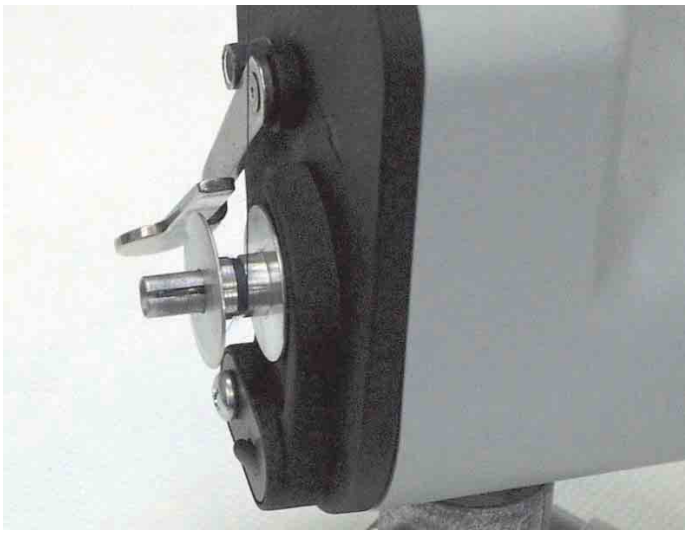
2.4 Threading the needle thread

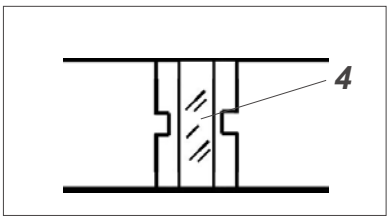
Caution: Risk of injury!

Switch the main switch off.
Thread the needle threads only with the sewing unit switched off.

See the illustration for threading the needle threads.

2.5 Winding up the hook thread



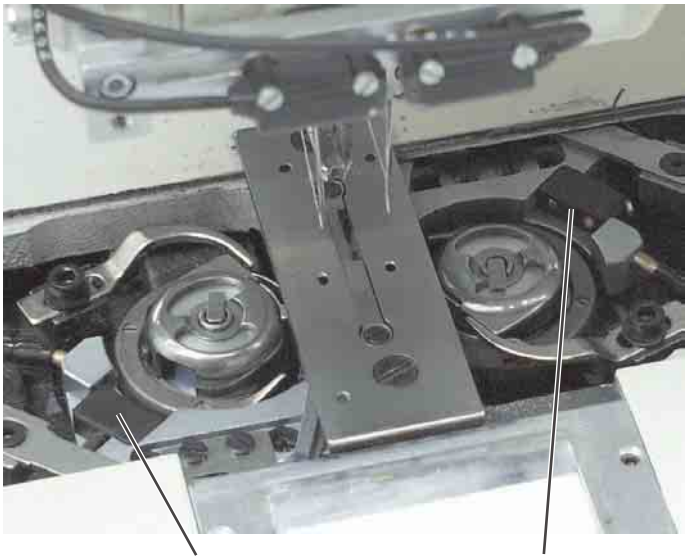


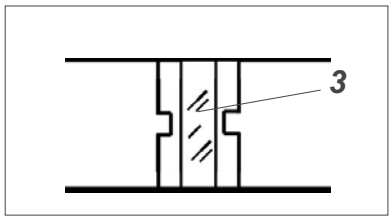
The separate winder allows to wind up up the hook threads independent of the sewing process.

- Remove thread remainders from the bobbin hubs before winding up.
- Put the thread reel on the thread reel holder.
- Thread the thread through the drill-hole 1 of the unwinding arm.
- Guide the thread through the guide 3.
- Guide the thread through the bobbin thread tension 1.
- Prewind the thread in the central supply groove of the bobbin hub in clockwise direction.
  The full supply groove guarantees a secure winding start, even in case of monofilament threads.
  With the thread supply in the supply groove it is ensured that the pocket opening can be safely finished after the remaining thread monitor has produced the message “bobbin empty”.
  The reflecting surface 4 of the bobbin hub has to be kept clean.
- Press the bobbin retainer 2 against the bobbin hub.
  The winder starts.
  After reaching the set bobbin filling quantity the winder stops automatically.
  See the service instructions for setting the bobbin filling quantity.

2.6 Remaining thread monitor

The remaining thread monitor supervises the left and right hook thread bobbin with the infrared reflected light barriers 1 and 2.





- When the bobbin is empty, the light beam emitted by light barrier 1 or 2 is reflected at the free reflecting surface 3 of the bobbin hub.
- The display of the control unit indicates the message shown in the right picture.
- The remaining thread in the supply groove of the bobbin hub guarantees that the pocket opening is safely finished.
  The transport carriage stops in its rear end position.

Caution: Risk of injury!

Switch the main switch off.

Clean the lenses of the light barriers only with the sewing unit switched off.

- Switch the main switch off.
- When changing the bobbin always clean the lenses of the light barrier with a **soft** cloth.
- Switch the main switch on.
- Start the new sewing process.

2.7 Slanted pocket opening (optional)

The 100/68 is optionally equipped with an automatic corner knife station guaranteeing a precise incision of the corners of slanted pockets.
For this purpose the machine head is equipped with disengageable needle bars.

Corner knife station

The adjustment of the corner knives as to the pocket length is programmable and is realized by a step motor.

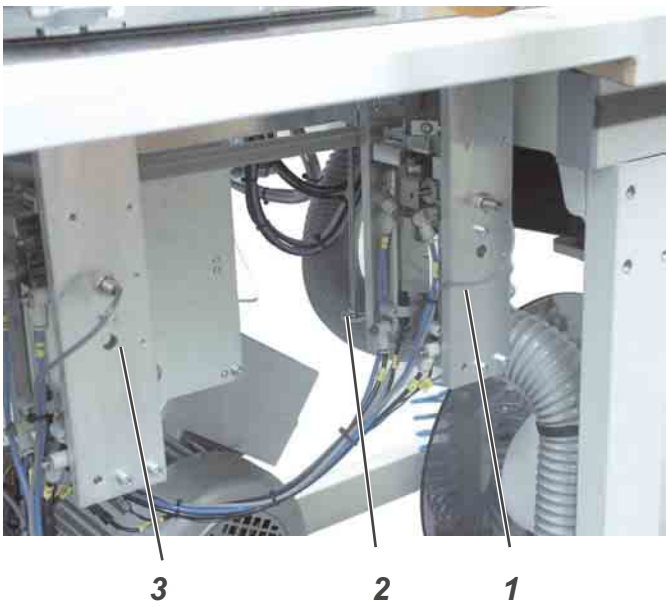
The slanted pocket corners result from the offset of the two seam rows programmable in steps of 1 mm.

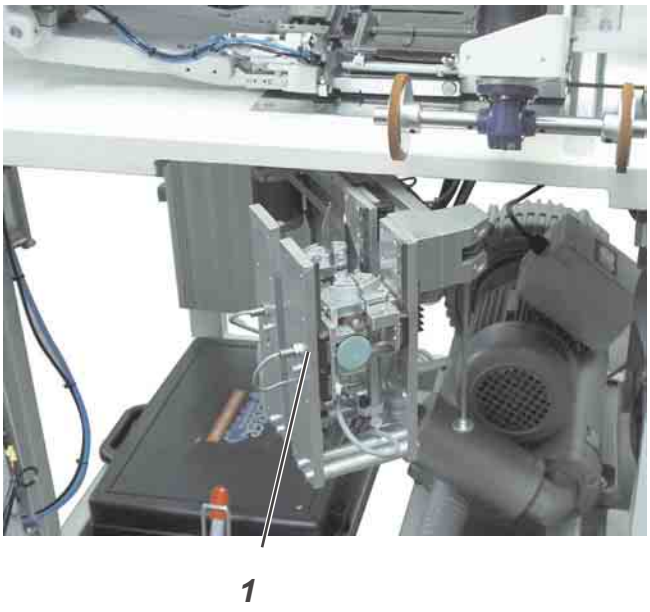
The programmable pocket corner incision - adjustable via two step motors - is freely selectable for the seam beginning and the seam end and amounts to max. +/- 10 mm in relation to the second seam.

The lateral distance of the corner knives to the seam is manually adjustable.

The whole unit can be folded out for adjusting and servicing.

2.7.1 Swivelling the corner knife station in and out





The corner knife station 1 can be swivelled out completely.

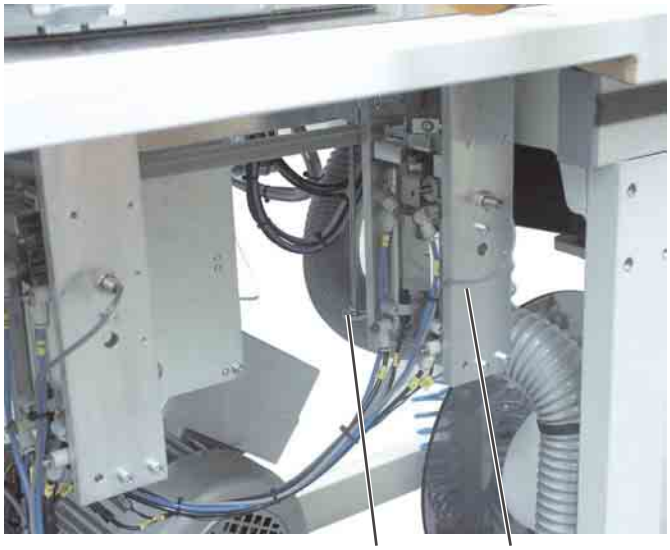
Caution: Risk of injury!

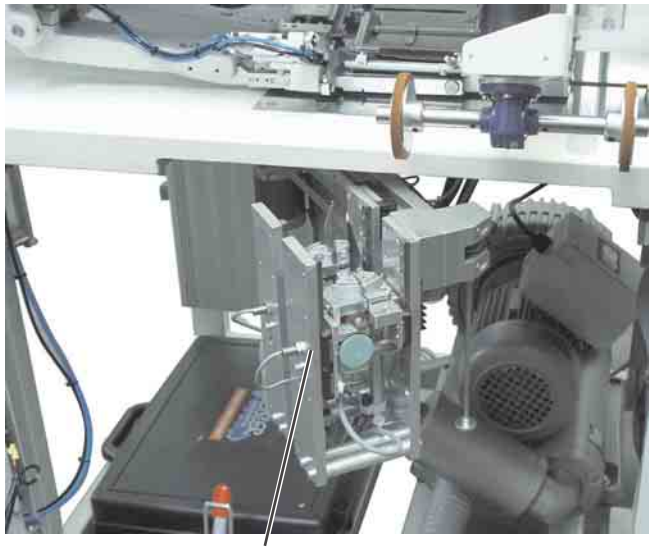
Switch the main switch off.

Swivel the corner knife station out only with the sewing unit switched off.

Swivelling the corner knife station out

- Push the rear corner knife support 3 (seam beginning) to the left.
- Pull catch 2 down.
- Swivel the corner knife station 1 to the left.
  The knives are accessible for adjusting and servicing.





Swivelling the corner knife station in

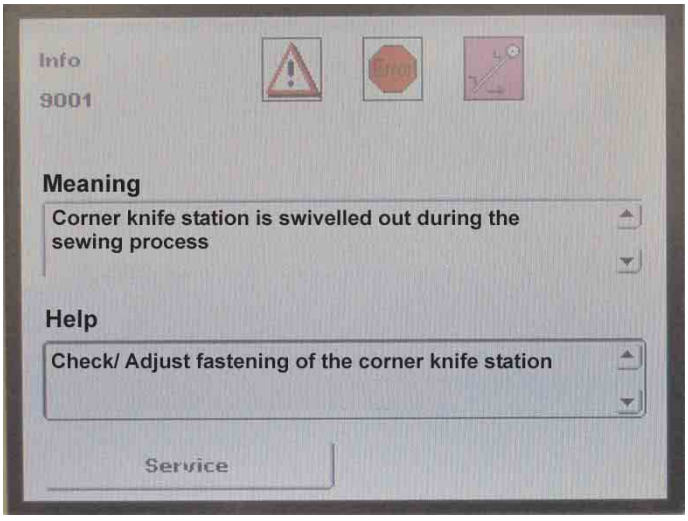
- Swivel the corner knife station 1 back under the sewing unit.
- Pull catch 2 down.
- Swivel the corner knife station 1 in completely.
- Release catch 2.

ATTENTION: Risk of breakage!

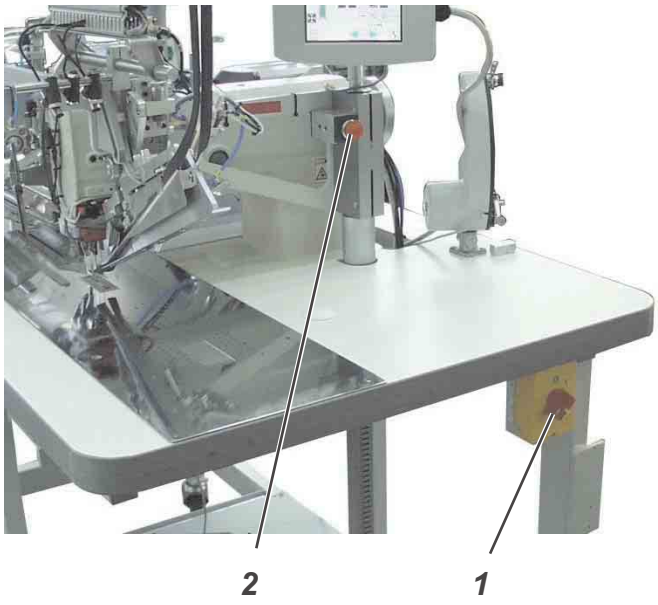
The holder 2 must snap in audibly.

Note:

If the corner knife station is swivelled out with the sewing unit switched on, the following message appears:

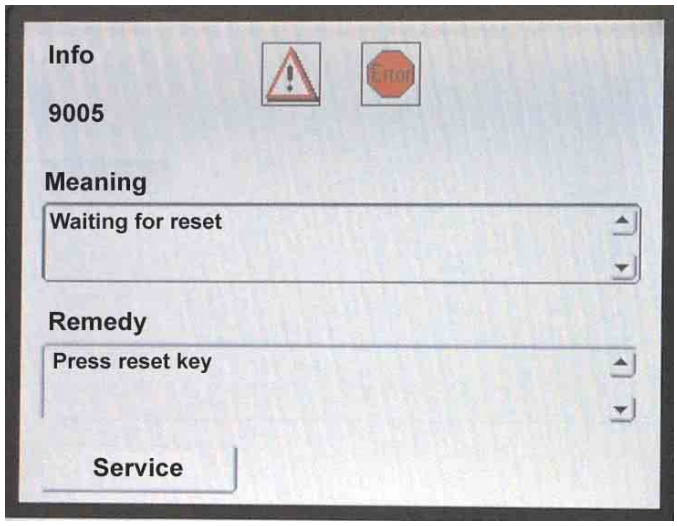


3. Switching on - Starting the sewing process - Program stop - Switching off



3.1 Switching on

– switch the main switch 1 on (turn in clockwise direction).
The control loads the machine program.
The start screen appears in the display of the control panel and indicates the following message:



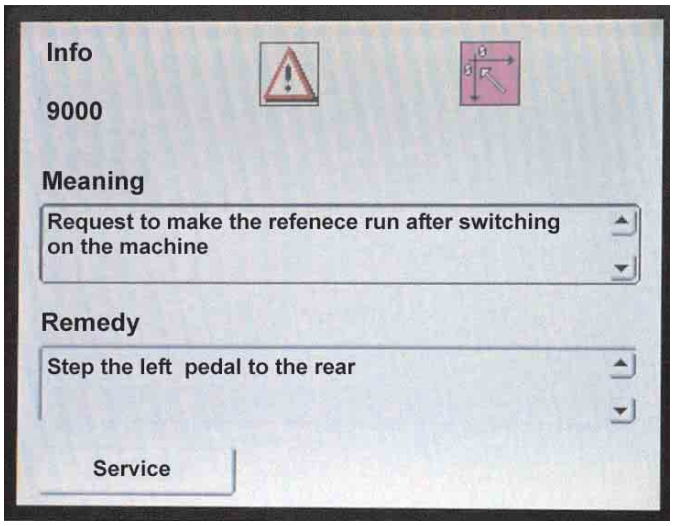
– Press the program stop switch 2.
If the transport clamps are not at the reference position, a reference run is made.

3.2 Reference position

Reference position

The reference position is necessary to reach a defined initial position.

When the sewing unit is switched on, the control checks whether the transport carriage is in its rear end position.
If this is not the case, the display shows the following message:



Caution: Risk of injury !

Risk of bruises between folder and deposit table.

– Press the program stop switch.
  The reference run starts.
  The transport carriage moves to its rear end position.
– The display changes over to the main screen of the sewing unit.

3.3 Starting the sewing process

– Actuate the central foot switch.
  By actuating the central foot switch repeatedly the different steps of the feeding process are started one after the other.
  The individual steps depend on the working method and on the equipment of the sewing unit.
– For feeding corrections:
  Actuate the right foot switch or press the reset key.
  The last step of the feeding process is cancelled.
  The workpiece can be fed anew.
– Step the central foot switch to the front.
  The sewing process starts.

The individual steps of the feeding process can be cancelled.

3.4 Program stop

For an immediate switch-off of the sewing unit in case of operating errors, needle breakage, material accumulation etc. the safety system of the 100/68 will react as follows:

– Press program stop 1.
  The sewing process is stopped immediately.

1

3.5 Switching off

– Switch the main switch 2 off (turn counter-clockwise).

2

4. Working methods

The individual working methods for trousers and men's jackets are described on the following pages.
The description is structured as follows:

Feeding positions

This item indicates the feeding points for the different workpieces (e.g. left and right parts).

Aligning the positioning aids

Here you will find a description how to adjust and align the positioning aids (e.g. positioning marks, marking lamps, guides etc.).

Feeding and starting the sewing process

Here you will find a list of the individual feeding steps with practice-oriented examples.

ATTENTION!

The steps of the feeding process are dependent on the equipment of the respective sewing unit.
So the feeding steps described in the examples apply to sewing units with the same equipment only.

Caution: Risk of injury!

Do not reach under the downholder, the transport clamp and the folder during the feeding process.

4.1 Working method “Production of trousers”

Possible processing variants

- Front trousers pockets with pocket bag positioned underneath
- Hind trousers pockets with or without flap, with pocket bag positioned underneath
- Hind trousers pockets with or without flap, with automatically fed reinforcement strip

Feeding method

Example: Hind trousers without flap, with pocket bag positioned underneath

1st step:

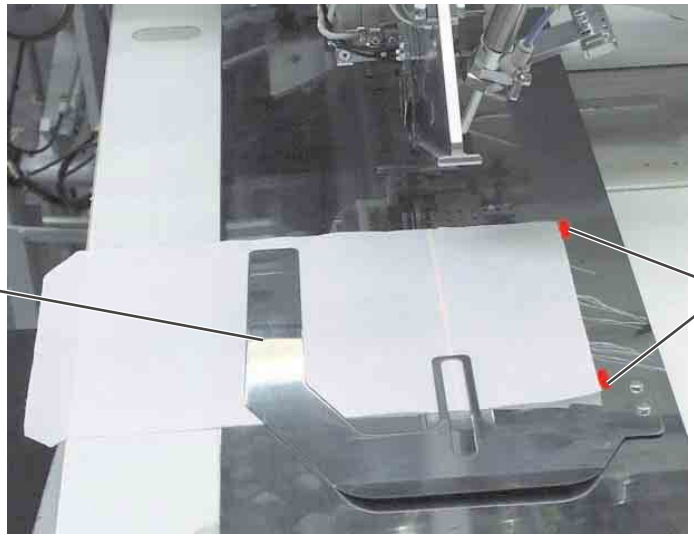
- Select the pocket program at the control panel
- Push the pocket bag under the pocket bag clamp 1 and position it at the markings 2.
  For example adhesive strips fitted on the fabric sliding sheet may serve as markings.

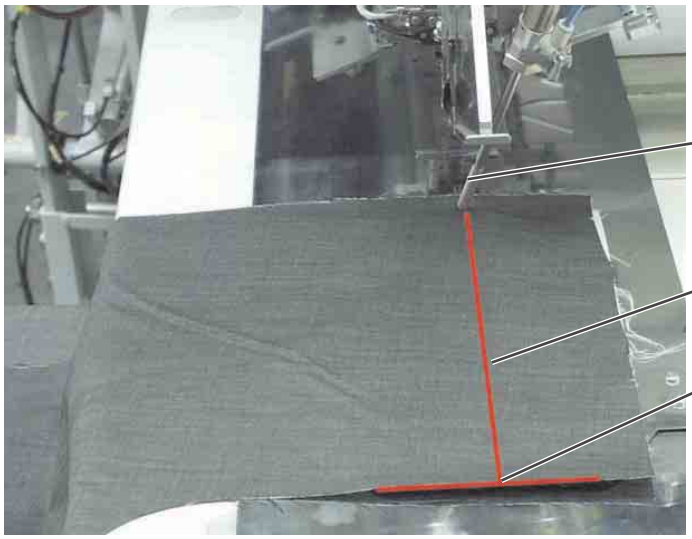
2nd step:

- Position the hind trousers at the “central positioning point” 5 and the marking 4.
- Actuate the central foot switch.
  The hind trousers is clamped by the fabric downholder 3.
- Smooth out the clamped hind trousers in the dart area.
- If the machine is additionally equipped with vacuum:
  Actuate the left foot switch.
  The vacuum is switched on.

3rd step:

- Actuate the central pedal.
  The transport clamps move to the front and lower on the workpiece.
- Position the piping strip 6 on the transport clamps flush with the front edges 7.
  The aligning of the various kinds of piping on the transport clamps is described more exactly in the following.
  See “Positioning of piping strips”.
- Actuate the central pedal once again.
  The folder 8 lowers.
- Actuate the central foot switch once again.
  The sewing process starts.


1
2


3
4
5

8
6
7

4.2 Working method “Breast welt pocket”

Processing patterned or plain-coloured fabrics

When processing plain-coloured fabrics it is not necessary to align men’s jacket fronts and breast welts as per pattern.

Thus, plain-coloured fabrics can be processed more quickly.

- Align positioning aids

Feeding method

Example: Men’s jacket front with breast welt pocket, patterned fabric

1st step:

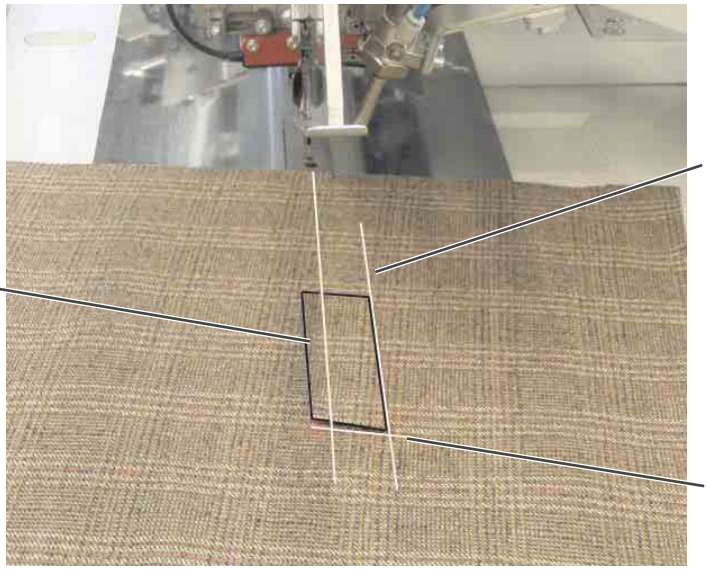
– Select pocket program **No. 7** at the control panel.
– Position breast welt 1 on the jacket front as per the stripes.
– Align the breast welt of the jacket front at the laser markings 2 and 3 (right and bias laser).
– Step on the start pedal.
The vacuum is switched on.
The jacket front is sucked.

2nd step:

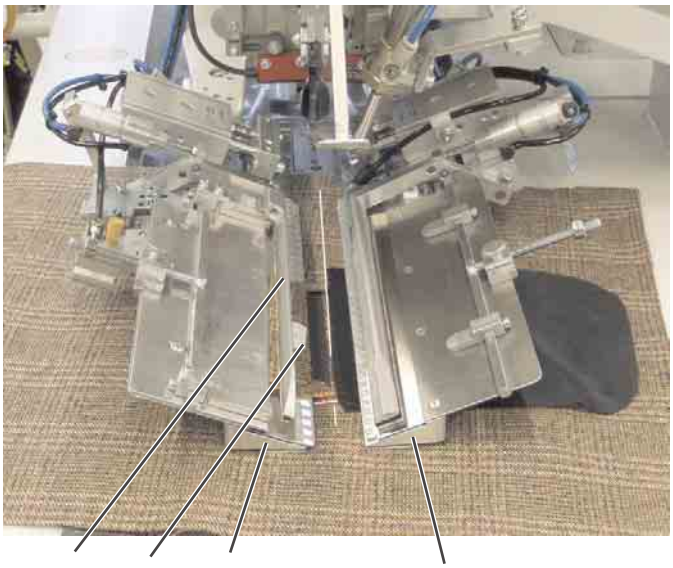
– Remove breast welt 1.
– Position pocket bag 4 at the left laser.
– Step on the central pedal.
The fabric clamps move to the front.
The right clamp 6 clamps the jacket front.
The left clamp 7 remains pressureless.

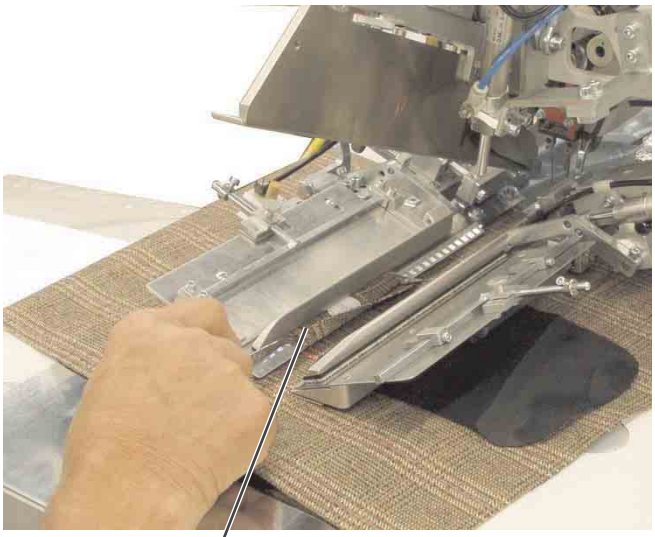
3rd step:

– Position breast welt 8 at the stop of the left fabric clamp (at the front laser).
– Fold back seam allowance 10 at the clamp and check the course of the pattern in longitudinal direction.
Correct the course of the pattern by slightly pulling the jacket front or by shifting the flap clamp 9.
– Step on the central pedal.
Pressure is applied on the left fabric clamp 7.
– Actuate the central pedal.
The folder lowers.
– Actuate the central pedal once again.
The sewing process starts.

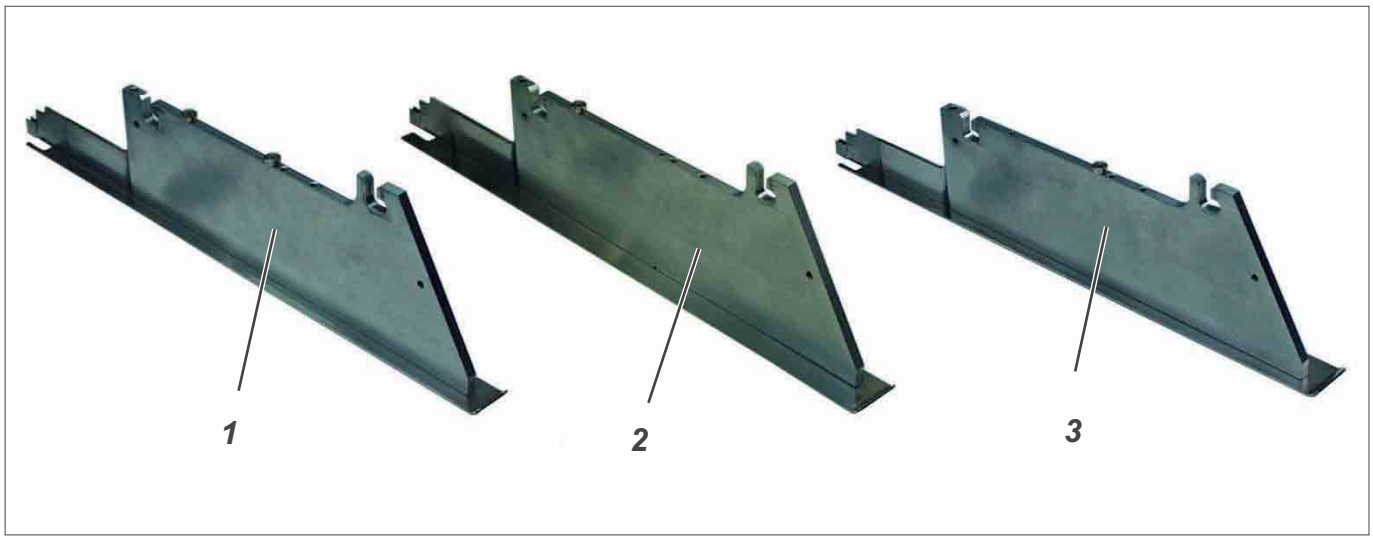

1
2
3

4
5


9
8
7
6


10

5. Quick clamp adjustment and folder monitoring



The lateral position of the transport clamps is influenced by the solenoid switches SC103 and SC106.

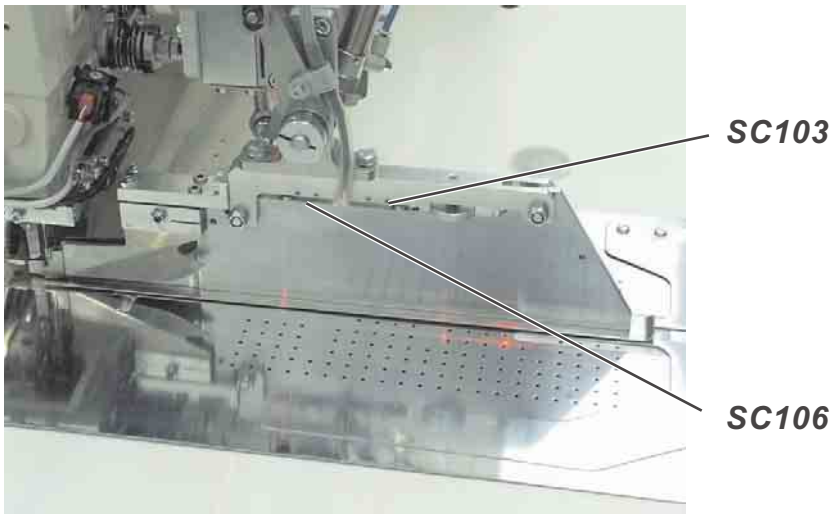
According to the equipment the magnets are fitted on the folders in different positions.

Depending on the selected folder the clamps are adjusted automatically.

1 = Folder for double piping

2 = Folder for single piping, left

3 = Folder for single piping, right



6. Function and operation of the optional equipment

This chapter describes the function and operation of the most important
optional equipment.

6.1 Tape feeding unit with automatic trimming and tape monitor

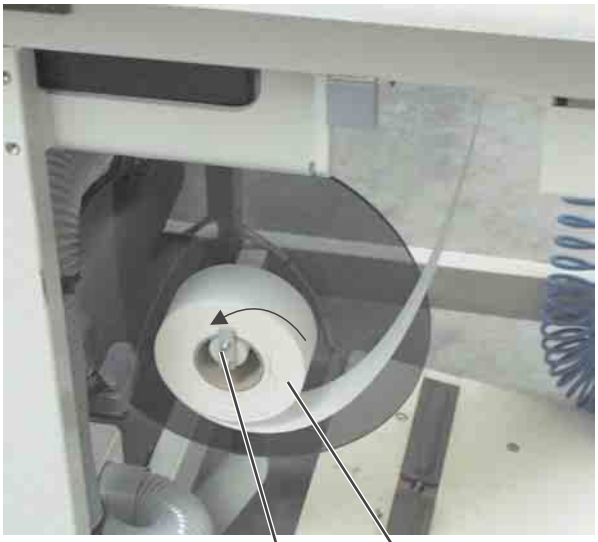
The step motor- and length-controlled tape feed with automatic trimming transports the reinforcement strip under the pocket opening and cuts it off at the seam end (e.g. when sewing inside and outside pockets of men's jackets).

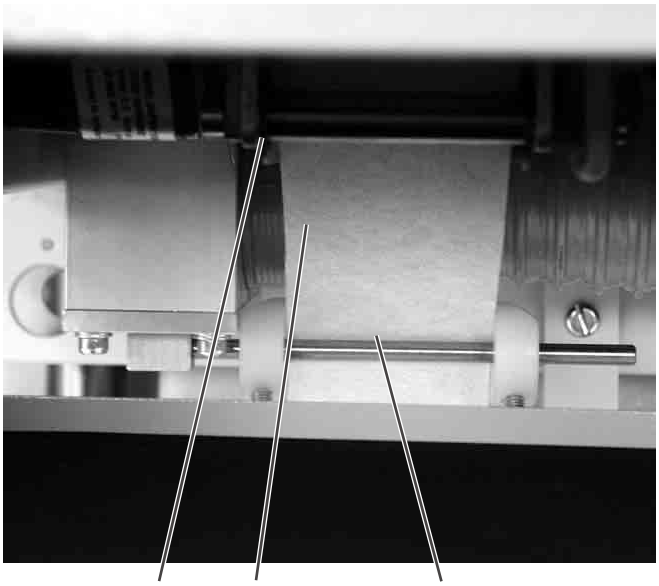
A sensor supervising the tape feed is integrated in the tape feeding unit.
The whole sequence is realized within the machine time
so that there are no further feeding or secondary processing times.

If the tape is not pulled during the sewing process, e.g. in case of accumulation or wrong threading, a message is produced by the control.

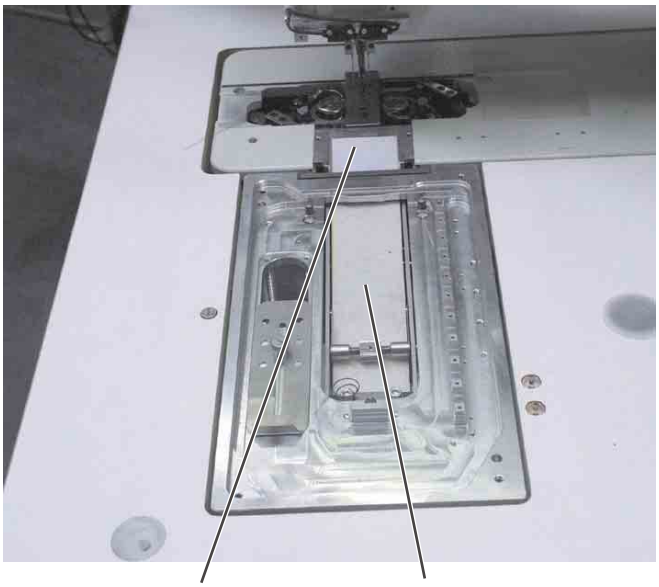
Activating and switching the tape feed on

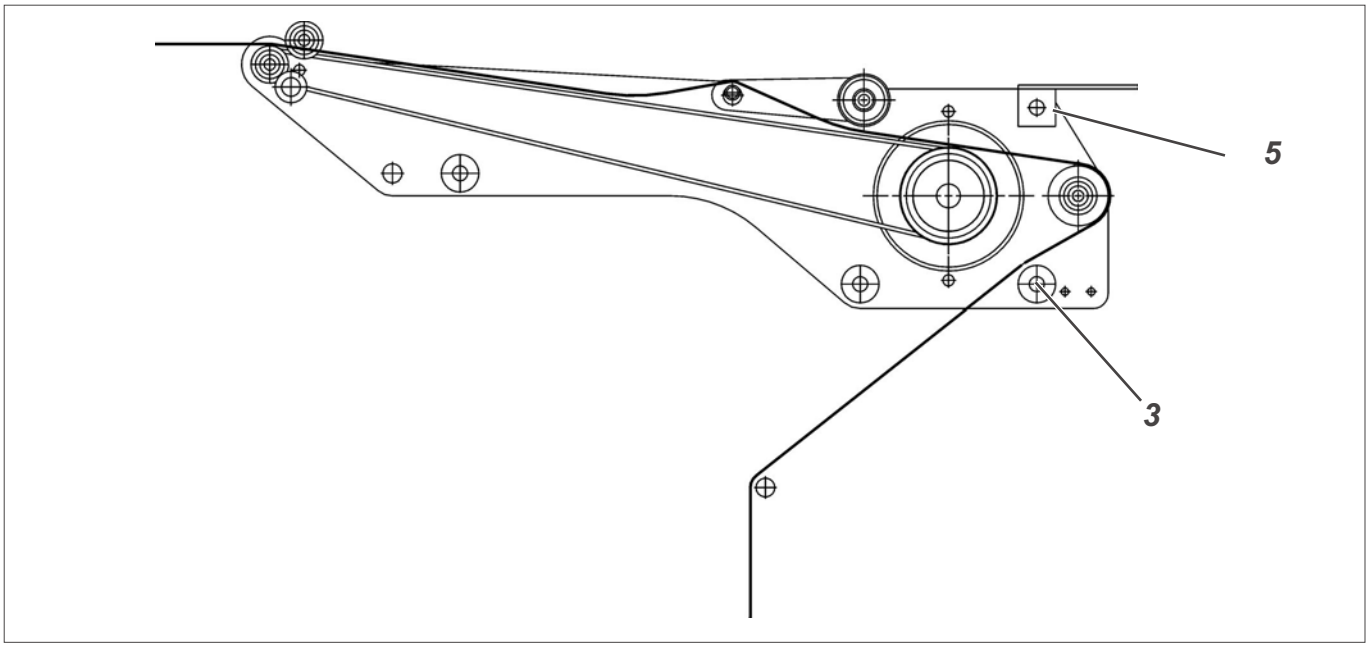
– Activate the tape feed at the control panel in the menu item "Seam functions".
– Tap the icon.


2
1


5
4
3

9
8
7


11
10


5
3

Inserting the reinforcement strip

– Put roll 1 on the tape roll holder 2.
  The full roll must rotate in the indicated arrow direction (counter-clockwise) when unwinding.
– Guide the reinforcement strip via guide 5.
– Swivel the fabric sliding sheet 9 aside.
– Press slide 7 backwards and lift off cover 8.
– Insert the reinforcement strip in the feeding device according to the sketch.
– Swivel the fabric sliding sheet 9 back again.

– Tap the key.
  The reinforcement strip is cut off and moved to the initial position.

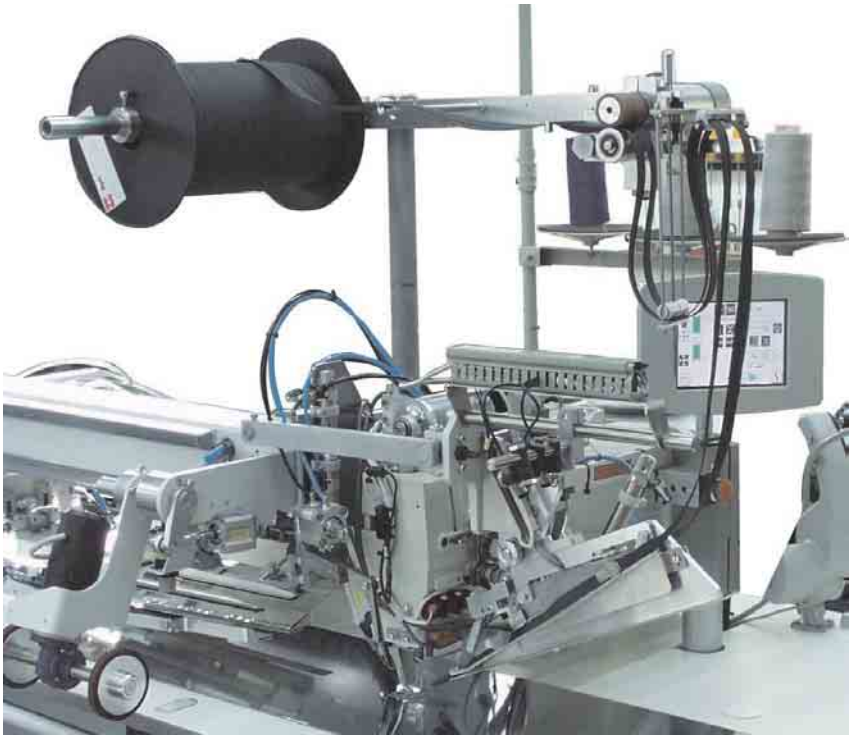
Function and operation

Before the next sewing cycle the reinforcement strip is fed forward a little by the transport roller of the feeding device.

When sewing the pocket opening the reinforcement strip is seized and sewn in according to the set sewing length.

The tape projection at the seam beginning and seam end can be set in the menu item “Seam parameters” with the parameters 21 and 22 (see programming instructions).

6.2 Endless zipper device



Function

When the zipper halves are pulled by the transport clamps during the sewing process, the feed rod 6 is pulled upwards by the zipper getting shorter.

The feed rod switches the zipper feed on and the drive rollers 7 and 8 go on feeding the zipper until the switch rod drops and switches the feed off again.

Thus it is made sure that there is always enough zipper material available for sewing.

Activating and switching the zipper device on

– Tap the key.
  The zipper device is activated.

Caution: Risk of injury !

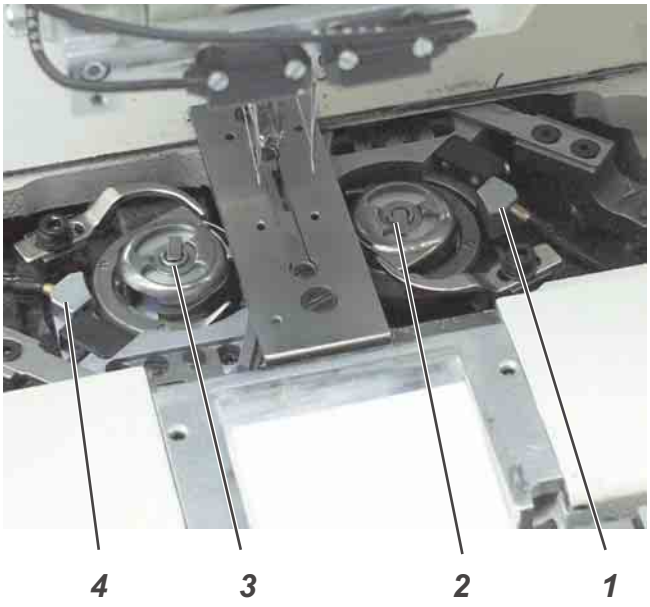
During the swivelling and cutting process.

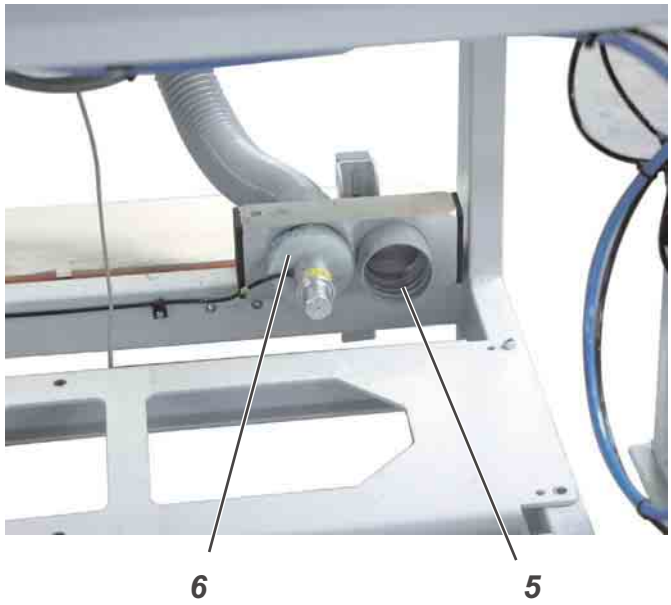
7. Maintenance

Caution: Risk of injury!

Switch the main switch off.
Carry out maintenance work only with the sewing unit switched off.

7.1 Cleaning





A clean sewing unit protects from malfunction!

Clean and check daily:

- Clean the area around the hooks 2 and 3 with the compressed air pistol.
- When changing the bobbin always clean the lenses of the light barriers 1 and 4
  of the remaining thread monitor with a **soft** cloth.
- Cleaning of the filter ring 6 at the vacuum valve 5:
  Blow out with compressed air pistol.

Clean and check daily:

- Check the water level in the pressure regulator.
  The water level must not reach the filter insert.
  After screwing in the drain screw 2 blow the water
  out of the water separator 1 under pressure.
  The filter insert separates dirt and condensed water. After a certain time of operation
  wash the dirty filter tray and the filter insert with benzine and blow them clean with the compressed air pistol.

ATTENTION!

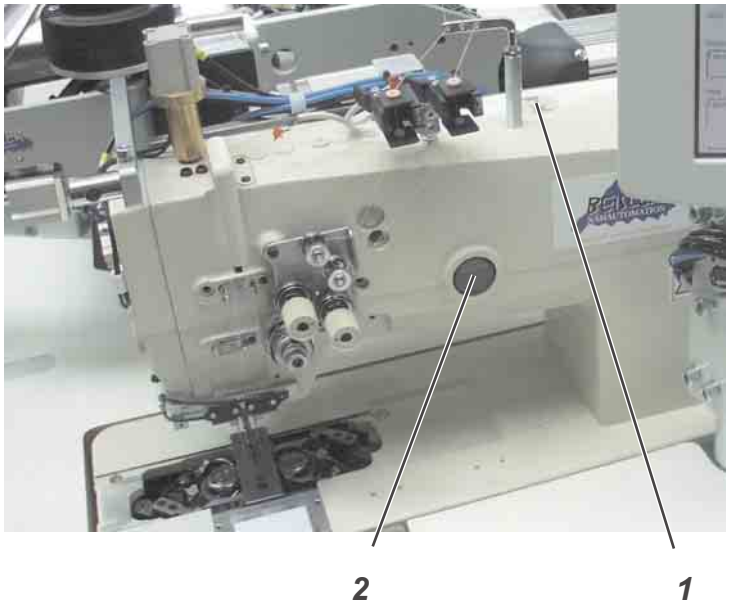
Do not use any solvents for washing out the filter tray and the filter insert!
They destroy the filter tray.

7.2 Oil level control

For lubrication of the sewing machine head use exclusively the lubricating oil
ESSO SP-NK 10.
SP-NK 10 can be bought from the sales office of **Beisler GMBH**
.

Checking the oil level in the oil reservoir 2 for the lubrication of the machine head

- The oil level in the oil reservoir 2 must not drop below the marking “Min”.
- If necessary, fill oil through the drill-hole 1 up to the upper marking.



Index **Page:**

Part 2: Assembly instructions 100/68

1. Scope of delivery 3

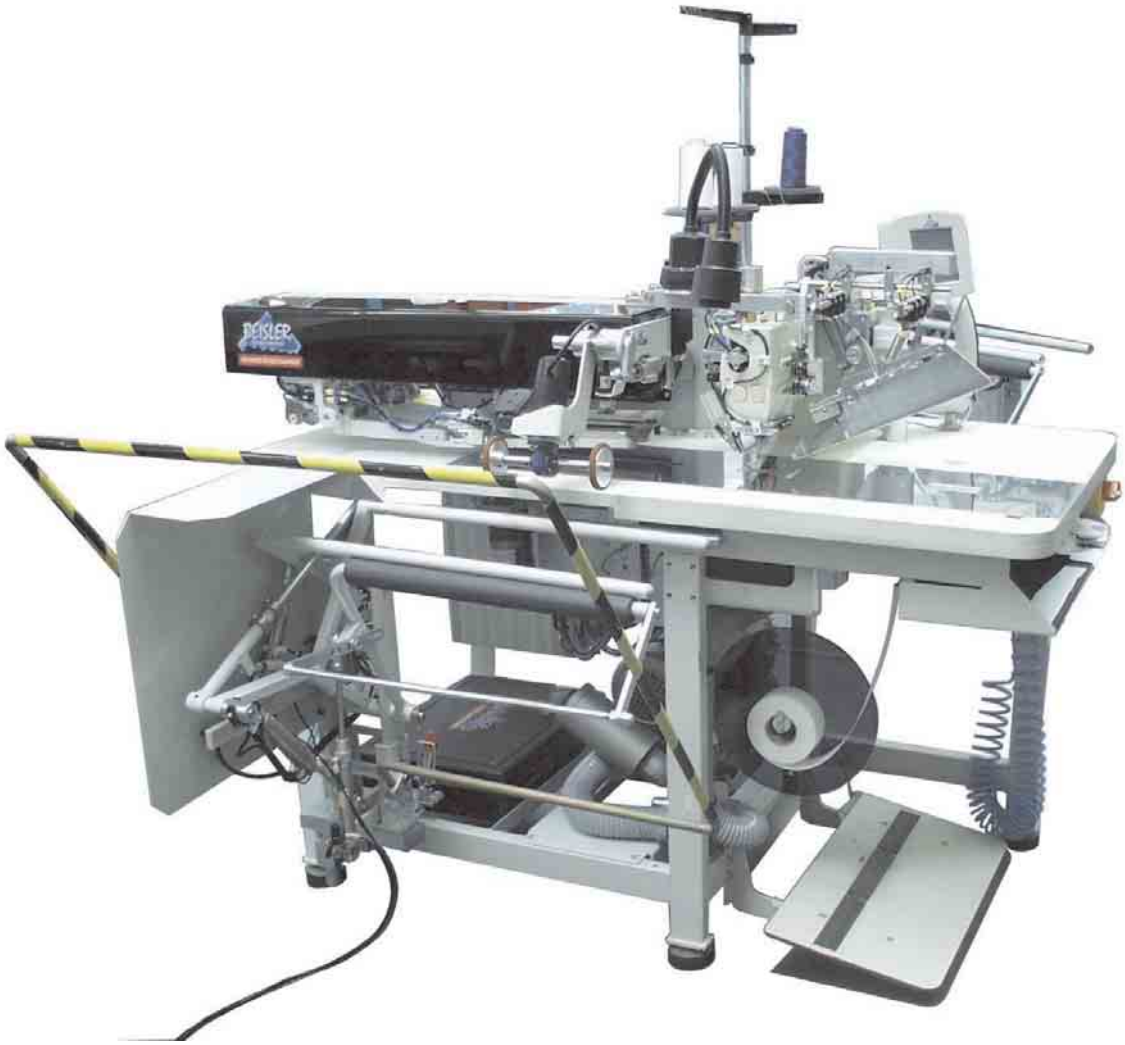
2. General notes 3

3. Electrical connection 4
3.1 Connecting the DACIII control panel 4
3.2 Making the mains connection 4

4. Pneumatic connection 5

5. Connection to the factory-own vacuum unit 6

6. Putting into operation 7



1. Scope of delivery

- Basic sewing unit for runstitching the openings of piped pockets, flap pockets and welt pockets with rectangular and slanted pocket corners, consisting of:
  - Step motors for material feed, length adjustment of the corner trimming device
    DC direct sewing drive
  - Twin needle lockstitch machine
  - DACIII control with control panel
  - Laser marking lamps
  - Sewing lamp (optional)
  - Compressed air maintenance unit with compressed air pistol
  - Thread reel holder
  - Material trays for additional parts to the right of the operator and under the table top
  - Tools and small parts in the accessories
  - Feeding devices and sewing equipment according to the working method
  - Optional equipment

2. General notes

ATTENTION !

The sewing unit must only be installed by trained specialist staff.

Any work on the electrical equipment of the sewing unit must only be carried out by electricians or correspondingly instructed persons.
The mains plug must be pulled out.

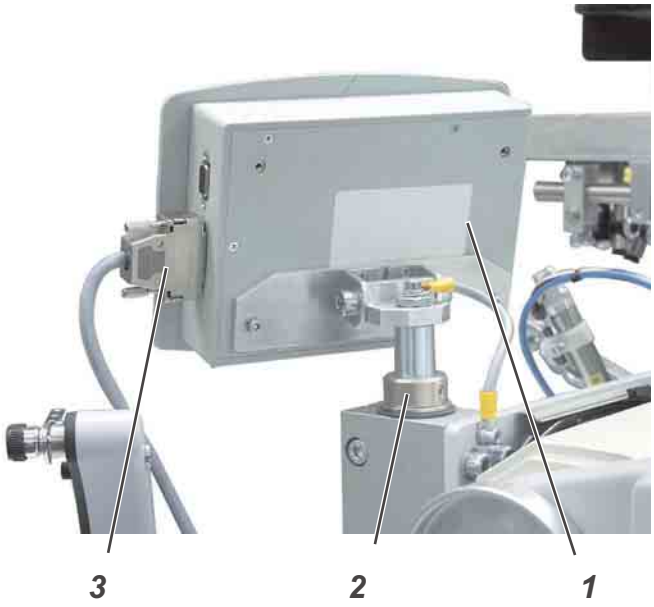
The enclosed operating instructions of the step motor manufacturer have to be observed by all means.

3. Electrical connection

ATTENTION!

Any work on the electrical equipment of the sewing unit must only be carried out by electricians or correspondingly instructed persons.
The mains plug must be pulled out.

3.1 Connecting the DACIII control panel



- Put the control panel 1 in the holder 2 and screw it tight.
- Push the plug 3 into the control panel cautiously.
- Secure the plug with the two screws.

3.2 Making the mains connection

- Connect the mains plug.

4. Pneumatic connection

For the operation of the pneumatic components the sewing unit has to be provided with anhydrous compressed air.

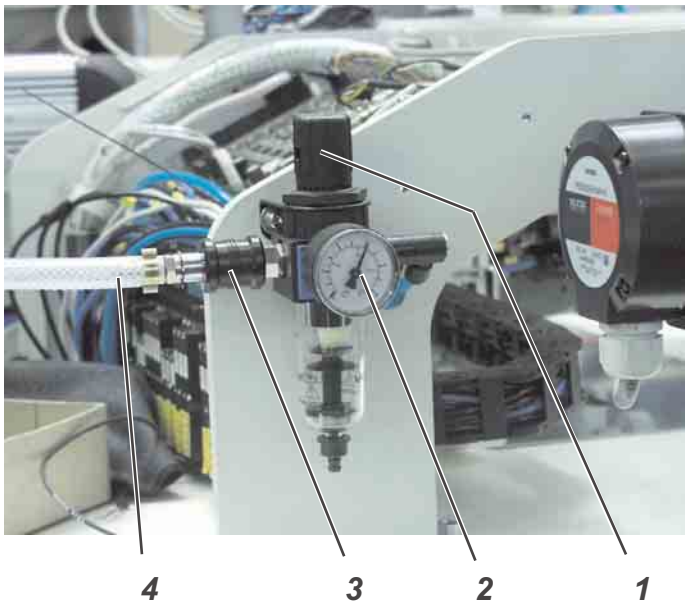
ATTENTION!

For a trouble-free function of the pneumatic control processes the compressed air net has to be rated as follows:

Even in the moment of maximum air consumption the minimum operating pressure must not drop below **6 bar**.

In case of a too high air pressure decrease:

- Increase the compressor output.
- Increase the diameter of the compressed air supply line.



Connecting the compressed air maintenance unit

- Connect the connecting hose 4 to the shut-off valve 3 and to the compressed air net.

Setting the operating pressure

- The operating pressure amounts to 6 bar.
  It can be read off at the manometer 2.
- For setting the operating pressure pull up and turn the rotary handle 1.
  - Turn in clockwise direction = increase the pressure
  - Turn counter-clockwise = reduce the pressure

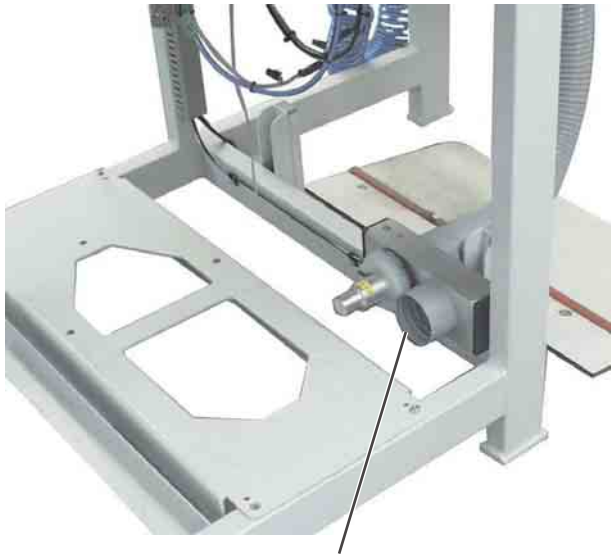
ATTENTION !

No oil-bearing compressed air must be fed from the compressed air net.

Behind the filter cleaned compressed air is withdrawn as blowing air for cleaning machine parts and for blowing workpieces out.
Oil particles contained in the blowing air lead to malfunction and stains on the workpieces.

5. Connection to the factory-own vacuum unit

1



2

The suction unit facilitates the precise feeding and positioning of the workpiece on the worktable 1.

– Connect the hose of the factory-own vacuum unit to the connection 2.

Note:

If no factory-own vacuum unit is available, a vacuum unit has to be ordered additionally.

6. Putting into operation

After completion of the installation work a sewing test should be made.

– Plug in the mains plug.

Caution: Risk of injury!

Switch the main switch off before threading the needle and hook thread.

– Threading the needle thread (see operating instructions).
– Threading the hook thread (see operating instructions).

– Switch the main switch on.
  The main screen is displayed.
– By actuating the central foot switch the different steps of the feeding process are released one after the other and the sewing process starts.
  The individual steps depend on the working method and on the equipment of the sewing unit.

ATTENTION !

Please take care that material is positioned under the transport clamps at the sewing start.
Moving the transport carriage without material may damage the coating of the transport clamps.

– For the selection of the sewing program and for further settings of the control unit see part 4: Programming instructions 100/68
– For feeding and operating see part 1: Operating instructions 100/68

Index **Page:**

Part 3: Service instructions 100/68

1. General notes . . . 3
1.1 Raising/ Lowering the sewing machine head . . . 4

2. Transport carriage . . . 6
2.1 Rear end position . . . 6
2.1.1 Position of the limit switch in the slotted hole . . . 7
2.1.2 Distance between switching screw and limit switch . . . 7
2.1.3 Stop guide for transport carriage . . . 7
2.2 Front end position . . . 8
2.2.1 Distance between switching screw and limit switch . . . 9
2.2.2 Front end position of the transport carriage . . . 9
2.2.3 Stop guide for the transport carriage . . . 9
2.3 Toothed belt tension . . . 10

3. Transport clamps . . . 12
3.1 Transport clamp stroke . . . 12
3.2 Parallelism of the transport clamps . . . 13
3.3 Distance between the transport clamps and the sole of the folder . . . 14
3.4 Parallelism of main clamp and sliding sheet . . . 15
3.5 Folding slides . . . 16
3.5.1 Adjusting travel and parallelism of the folding slides . . . 16
3.5.2 Position of the folding slide when retracted . . . 17
3.5.3 Adapting the folding slide . . . 18
3.6 Flap clamp . . . 19
3.6.1 Flap clamp position . . . 19
3.6.2 Opening stroke of the flap clamp . . . 20
3.7 Changing the rubber strips of the clamp . . . 21

4. Folder . . . 22
4.1 Changing the folder . . . 22
4.2 Position of the folder to the needles and to the centre knife . . . 23
4.3 Lifting motion of the folder . . . 24
4.4 Guide plates at the folder . . . 26

5. Trimming and clamping device for the needle threads . . . 28
5.1 Function . . . 28
5.2 Exchanging and adjusting knife and thread catcher . . . 29

6. Centre knife . . . 30
6.1 Position of the centre knife . . . 30
6.2 Needle protection . . . 31

Index Page:

7. Adjusting the bobbin thread catcher 32
7.1 Thread catcher 32

8. Knives for corner incision
8.1 Presetting 33
8.2 Belt tension 34
8.3 Aligning the corner knife station as to the seams 35
8.4 Adjusting the slant of the corner incisions 37
8.5 Exchanging the corner knives 38

9. Laser markings 39

10. Photocells for flap scanning 40

11. Fabric sliding sheet and vacuum plate 41
11.1 Adjusting the height of the vacuum plate 41

12. Adjusting the optional equipment 42
12.1 Downholder 42
12.2 Ejector roller 43
12.3 Zipper scissors 44

13. Hook lubrication 48

14. Locator and tooth belt disc 49

15. Maintenance 50

1. General notes

The service instruction manual on hand describes the adjustment of the sewing unit 100/68 in an appropriate sequence.

ATTENTION !

Some of the setting positions are interdependent.
Therefore it is absolutely necessary to do the adjustment following the described order.

The operations described in the service instructions must only be executed
by qualified staff and correspondingly instructed persons respectively!

Risk of breakage !

Before the sewing unit is put into operation again after having been disassembled the necessary adjustments have to be carried out according to the service instructions.

Before any adjusting operations of parts involved in the stitch formation are made:

– Insert a new needle without any damage.

Caution: Risk of injury !

Before repair, converting and maintenance work is done:

– Switch the main switch off and disconnect the sewing unit from the pneumatic
supply system.
Exception: Adjusting operations carried out with the help of test or setting programs.

Adjusting operations and function tests when the sewing unit is running

– Carry out adjusting operations and function tests of the running sewing unit
only under observation of all safety measures and with utmost caution.

Adjusting operations in the needle zone

– Parts which can lead to injuries have to be removed before carrying out the adjusting operations.
Exception:
The parts are absolutely necessary for the adjusting operations.

1.1 Raising/ lowering the sewing machine head

For maintenance and repair work the machine head can be raised.
For this purpose the transport carriage must be in its rear position.

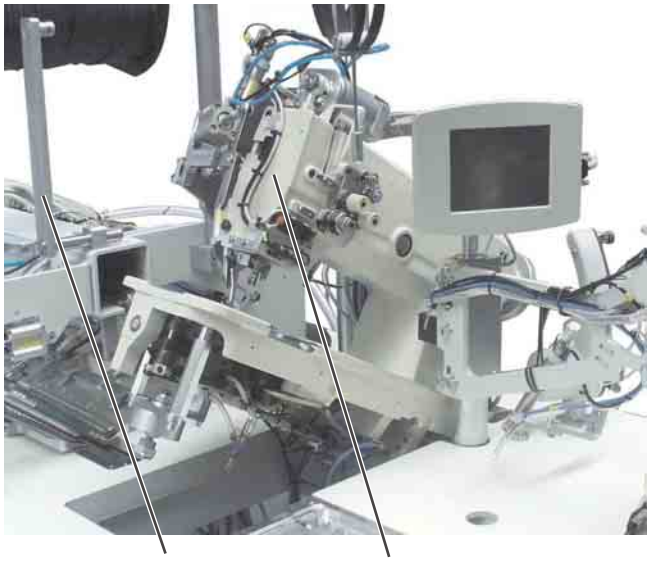
Caution: Risk of injury!

Switch the main switch off.

Raise or lower the machine head only with the sewing unit switched off.

1

2



4 *3*

Raising the machine head

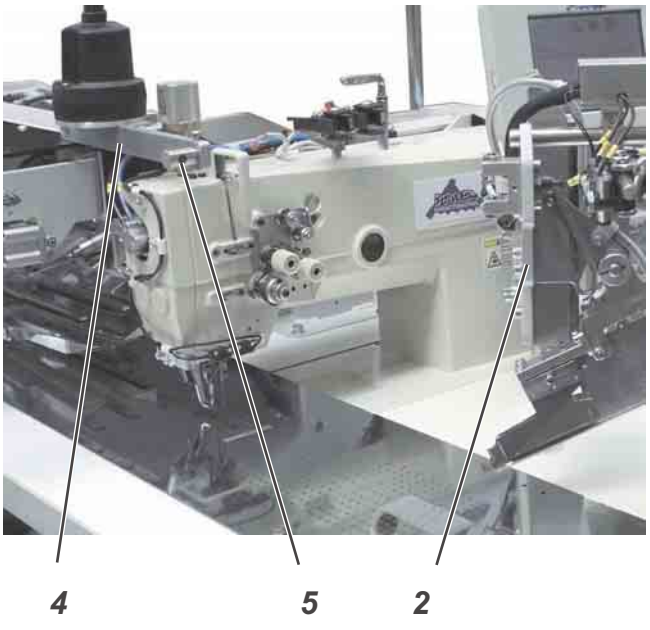
– Swivel the folding station 1 aside by 90°.
– Swivel the fabric sliding sheet 2 to the left.
– Unscrew the fastening screw 6.
– Loosen the screw at the locking lever 4 and raise the holder.
– Tighten the screw.
– Lift the machine head in the area of the head cover 3 and raise it cautiously.
  The area underneath the sewing machine head is accessible for cleaning and adjusting now.

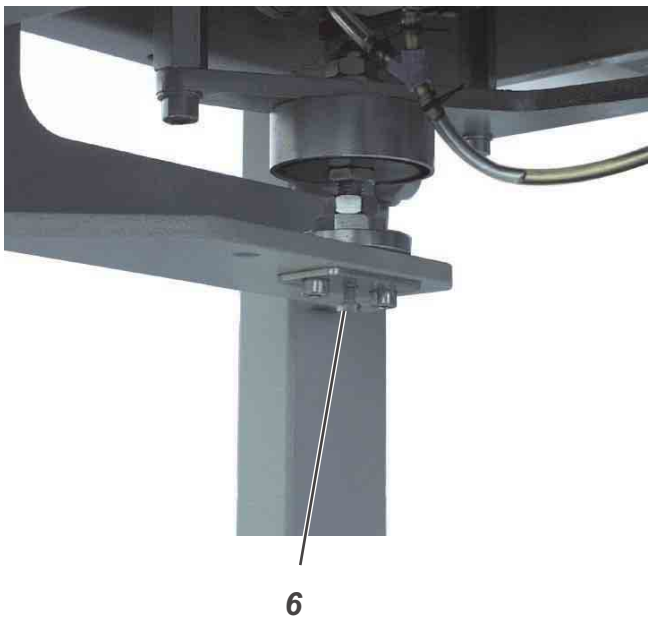
Caution: Risk of injury!

Do not reach into the cutout of the table top when the machine head is raised.

Swinging the machine head back

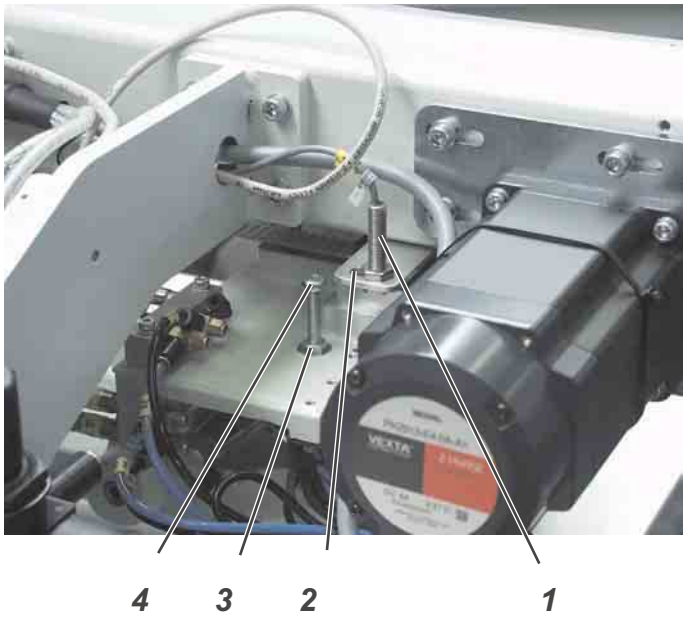
– Hold the machine head tight.
– Lift the machine head cautiously until catch 5 releases.
– Lower the machine head cautiously into the cutout of the table top.
– Swivel the fabric sliding sheet back again and let it catch.
– Loosen the screw at the locking lever 4.
– Swivel the lever downwards.
– Tighten the fastening screw 6 again.
– Swivel the folding station back until it snaps in catch 5.
– Tighten the screw at the locking lever 4.

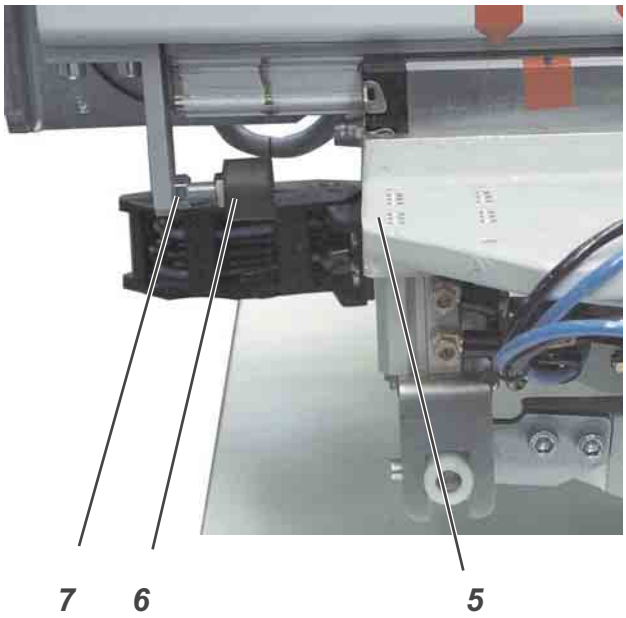




2. Transport carriage

2.1 Rear end position





Standard and checking

The switch 1 determines the rear end position of the transport carriage. It must always be in the very rear of the slotted hole 2.

When the transport carriage is in its end position, there must be a distance of 1 mm between the limit switch 1 and the switching screw 4.

When the transport carriage has gone back so far that the switching screw 4 stands centrically under the switch 1, there must be a distance of 2 mm between the transport carriage 5 and the stop 6.

Caution: Risk of injury!

Switch the main switch off.

Check and adjust the switch and the stop for the rear end position of the transport carriage only with the sewing unit switched off.

2.1.1 Position of the limit switch in the slotted hole

Checking

- Unscrew the screws 8 and take off the covering cap 9.
- Check the position of the limit switch 1 in the slotted hole 2.

Correction

- Loosen the upper counternut at the limit switch 1.
- Push the limit switch to the very rear of the slotted hole.
- Tighten the upper counternut again.

Attention: Risk of breakage !

After operations on the limit switch always check the distance to the switching screw 4.

2.1.2 Distance between switching screw and limit switch

Checking

- Push the transport carriage 5 to the rear until the switching screw 4 is located under the limit switch 1.
- Check the distance of 1 mm between limit switch 1 and switching screw 4.

Correction

- Loosen the counternut 3 at the switching screw 4.
- Adjust the height of screw 4.
  Distance between switching screw and limit switch = 1 mm.
- Tighten the counternut 3.

2.1.3 Stop guide for the transport carriage

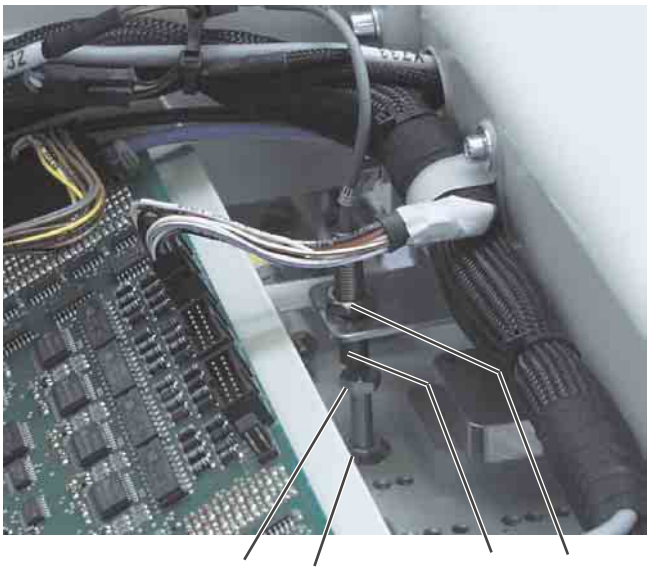
Checking

- Push the transport carriage 5 to the rear until the surface of the switching screw 4 is located centrically above the limit switch 1.
- Check whether in this transport carriage position the distance between the stop guide 6 and the transport carriage amounts to 2 mm.

Correction

- Push the transport carriage to the rear until the surface of the switching screw 4 is located centrically above the limit switch 1.
- Loosen the counternut 7.
- Approach the stop guide 6 to the transport carriage by 2 mm.
- Tighten the counternut 7.

2.2 Front end position



Standard and checking

The switch 1 determines the front end position of the transport carriage.

It must be set in such a way that there is a distance of 325 mm between the needles and the fronts of the transport clamps when they have moved to the front.

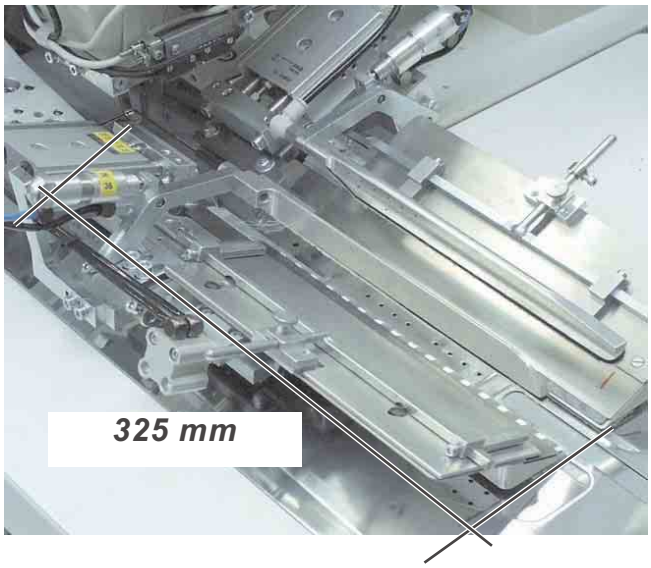
When the transport carriage is in its front end position, there must be a distance of 1 mm between the limit switch 1 and the switching screw 4.

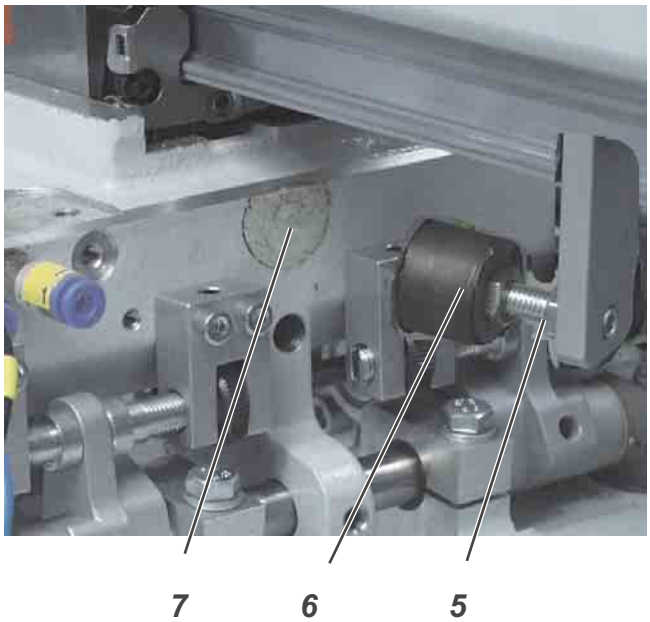
When the transport carriage has moved forward so far that the switching screw 4 stands centrically under the switch 1, there must be a distance of 2 mm between the transport carriage 7 and the stop 6.

Caution: Risk of injury!

Switch the main switch off.

Check and adjust the switch and the stop for the front end position of the transport carriage only with the sewing unit switched off.





2.2.1 Distance between switching screw and limit switch

Checking

- Push the transport carriage 7 to the front until the switching screw 4 is located under the limit switch 1.
- Check the distance of 1 mm between limit switch 1 and switching screw 4.

Correction

- Loosen the counternut 3 at the switching screw 4.
- Adjust the height of screw 4.
  Distance between switching screw and limit switch = 1 mm.
- Tighten the counternut 3.

2.2.2 Front end position of the transport carriage

- Push the transport carriage 7 to the front until the switching screw 4 is located under the limit switch 1.
- Measure the distance between the needles and the fronts of the transport clamp.
  This must amount to 325 mm.
- Adjust the limit switch 1 in the slotted hole accordingly.

2.2.3 Stop guide for the transport carriage

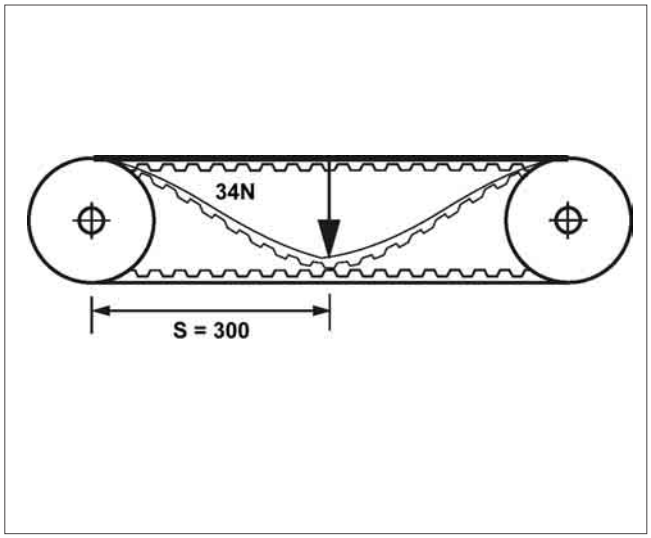
Checking

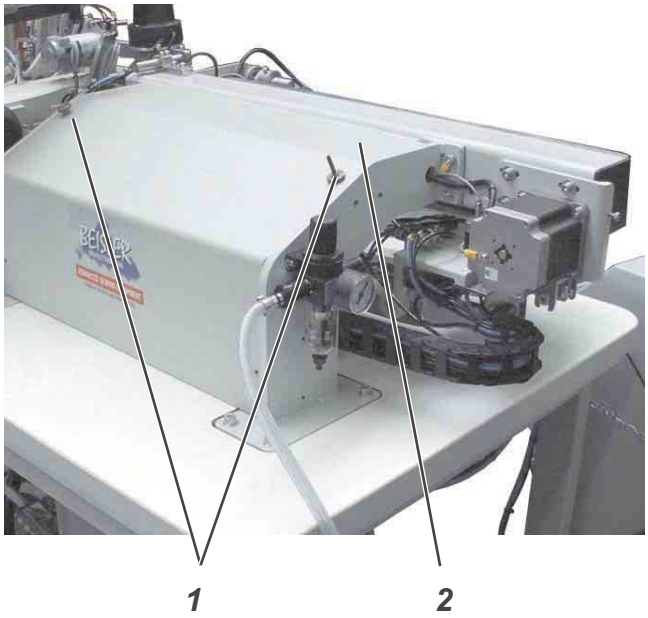
- Push the transport carriage 7 to the front until the surface of the switching screw 4 is located centrically above the limit switch 1.
- Check whether in this transport carriage position the distance between the stop guide 6 and the transport carriage amounts to 2 mm.

Correction

- Push the transport carriage to the front until the surface of the switching screw 4 is located centrically above the limit switch 1.
- Loosen the counternut 5.
- Approach the stop guide 6 to the transport carriage by 2 mm.
- Tighten the counternut 5.

2.3 Toothed belt tension





Caution: Risk of injury!

Switch the main switch off.

Check and adjust the toothed belt tension only with the sewing unit switched off.

Standard and checking

Over the tightening length S= 300 mm the toothed belt must bend under the test load FV = 34 N.

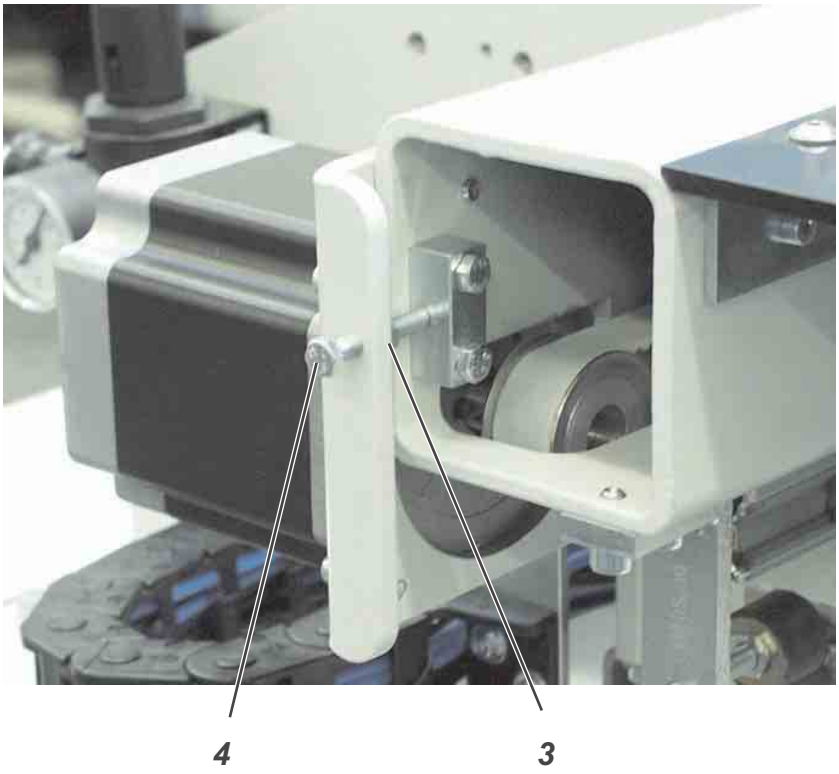
Consequences of a too high toothed belt tension

- Reduced durability
- Noisy running

Consequences of a too low toothed belt tension

- No faultless mesh between belt teeth and disc toothing
- The teeth may skip over under load
- Non-uniform stitch lengths
- Loss of steps possible

- Unscrew the screws 1 and take off the covering cap 2.
- Place the test load in the middle of the toothed belt (e.g. with the help of a spring balance).
  The tension of the toothed belt is correct if the upper belt half just touches the lower one.

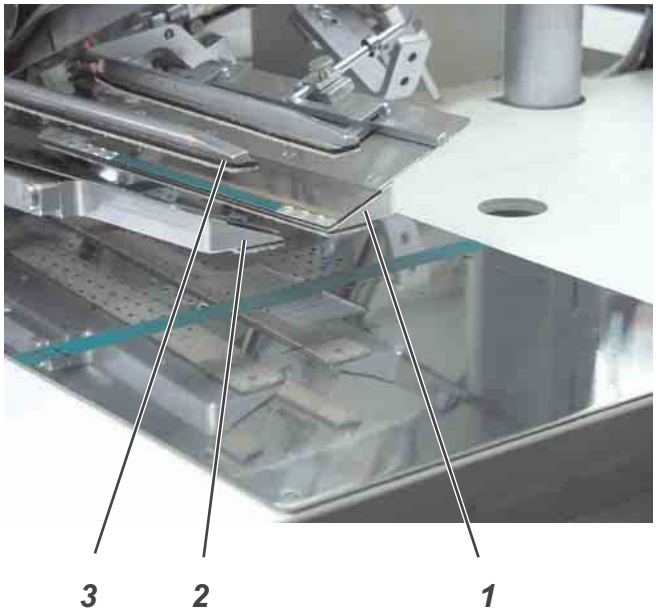


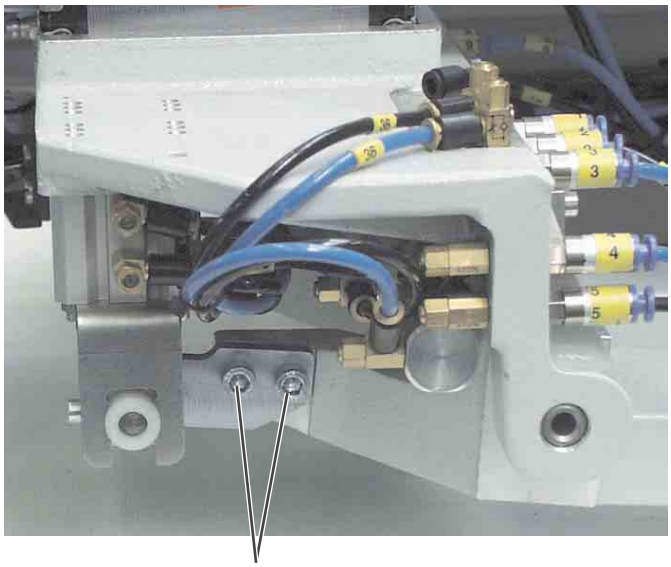
Correction

- Loosen the counternut 3.
- Adjust the toothed belt tension with the Allen screw 4.
- Tighten the counternut 3.

3. Transport clamps

3.1 Transport clamp stroke





Caution: Risk of injury!

Switch the main switch off.

Check and adjust the transport clamp stroke only with the sewing unit switched off.

Standard and checking

When the flap clamps 3 are closed, the raised transport clamps 1 and 2 must pass the machine arm without hitting it.

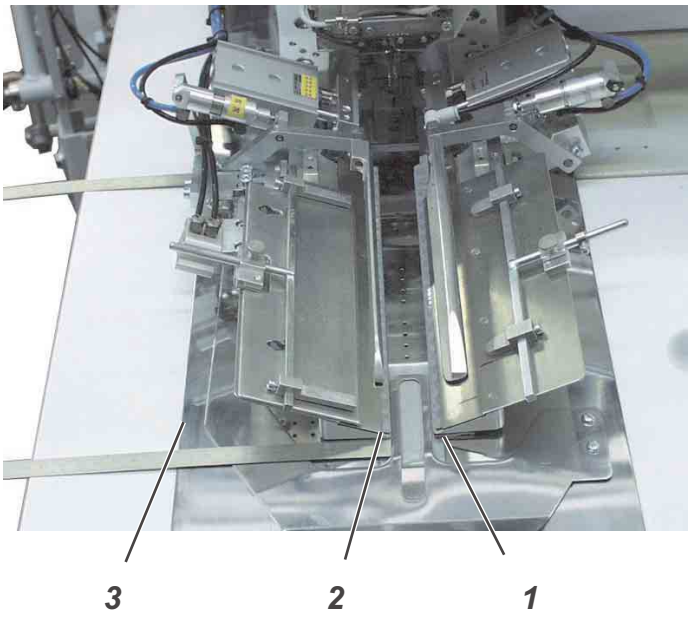
The distance between the front edges of the raised transport clamps and the fabric sliding sheet should amount to 28 mm on the left and on the right.

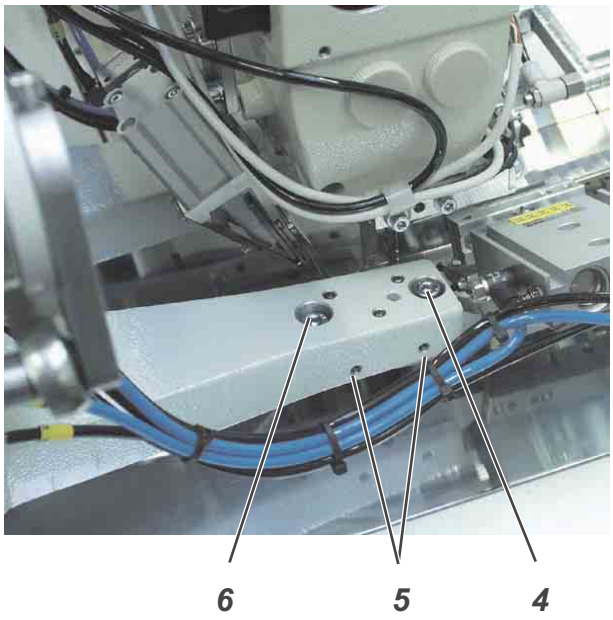
- Push the transport carriage under the machine arm.
- Check the stroke of the two transport clamps.

Correction

- Loosen screw 4.
- Adjust the height of the transport clamps.
- Tighten the screws 4.

3.2 Parallelism of the transport clamps





Caution: Risk of injury!

Switch the main switch off.

Check and adjust the parallelism of the transport clamps only with the sewing unit switched off.

3

standard and checking

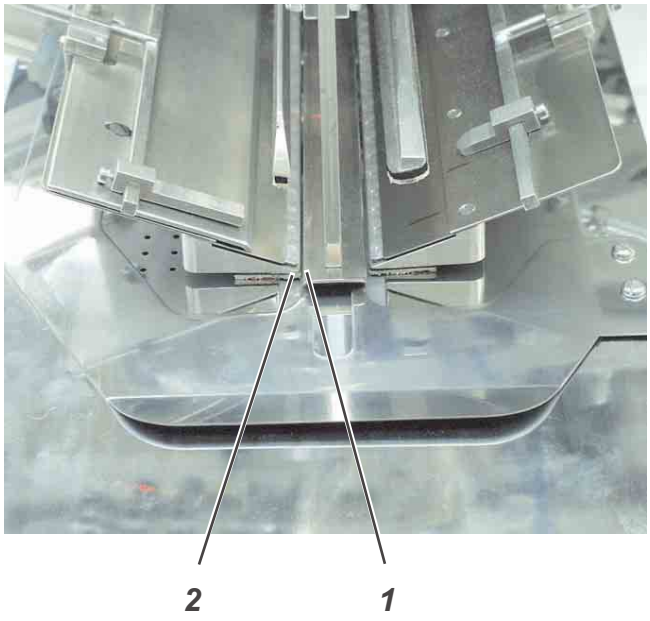
The transport clamps 1 and 2 should run parallel to the edge of the sliding sheet 3.

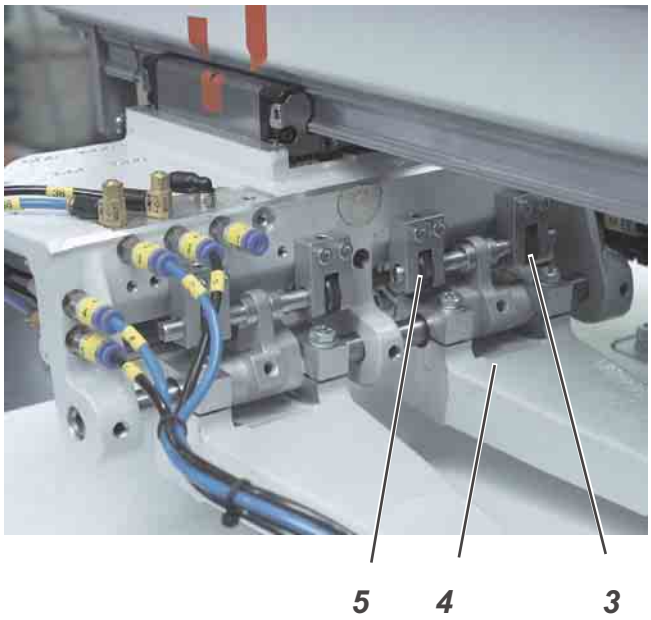
- Push the transport carriage to the front.
- Check the distance of the transport clamps to the edge of the sliding sheet.

Correction

- Loosen the screws 4 and 6.
- Adjust the transport clamps with the screws 5 so that they are in parallel position to the edge of the sliding sheet.
- Tighten the screws 4 and 6.

3.3 Distance between the transport clamps and the sole of the folder





Standard and checking

There must be a certain distance between the outer edges 1 of the folder sole and the inner edges 2 of the transport clamps. When processing medium-weight materials the distance should amount to approx. 1.0 to 1.5 mm.

The distance is necessary to guarantee uniform piping strips on both sides as well as an unhindered material feed.

Caution: Risk of injury!

Switch the main switch off.

Check and adjust the transport clamps only with the sewing unit switched off.

Attention: Risk of breakage !

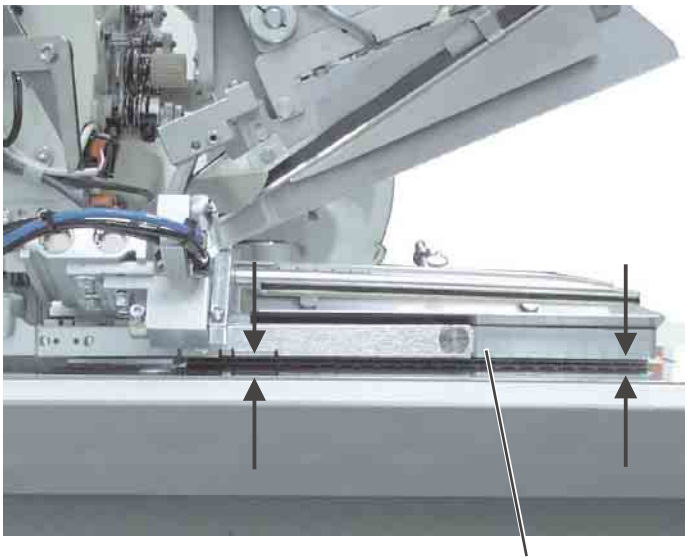
Before adjusting the folder has to be correctly aligned (see chapter “4.2 Position of the folder as to the needles and the centre knife”).

– Push the transport carriage to the front.
– Let the compressed air off.
– Lower the folder.
– Check the distance between folder sole and transport clamps.

Correction

– Adjust the clamping arm 4 with the knurled nuts 3 and 5.

3.4 Parallelism of main clamp and sliding sheet



1 *3* *2*

Caution: Danger of injury!

Switch the main switch off.

Check and adjust the transport clamps only with the sewing unit switched off.

3

Standard and checking

The main clamp 1 must be in parallel position to the sliding sheet over its whole length.

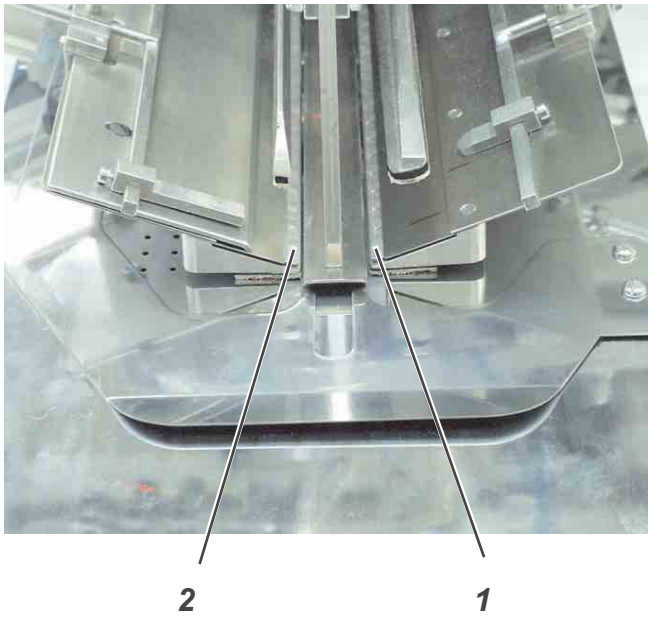
- Move the clamp to the feeding position.
- Place thin fabric under the clamping arms.
- Close the main clamp.
- Pull the fabric out to the side and check for equal distance.

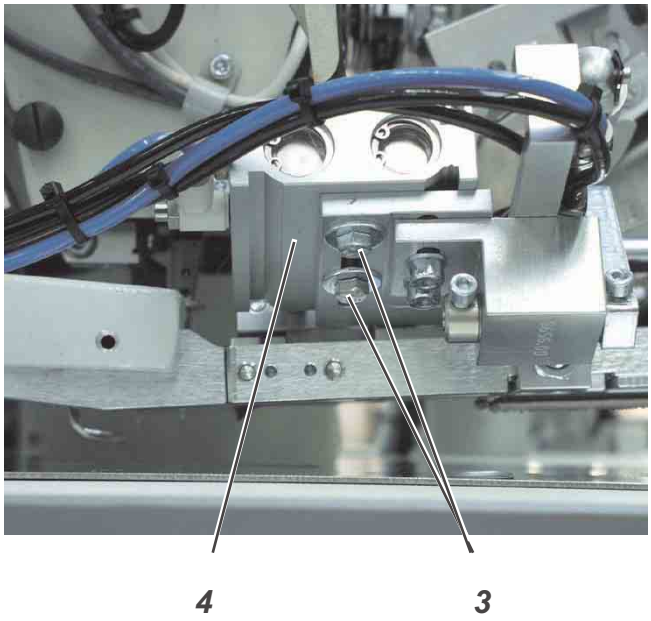
Correction

- Loosen the counternuts 2.
- Adjust the pressure with the Allen screws 3.
- Tighten the counternuts 2 again.

3.5 Folding slides

3.5.1 Adjusting travel and parallelism of the folding slides





Caution: Risk of injury!

Switch the main switch off.

Check and adjust the folding slides only with the sewing unit switched off.

Standard and checking

According to the needle distance the folding slides 1 and 2 have to be shifted by the following values when extending and retracting.

- Needle distance 10 mm = approx. 3.5 mm
- Needle distance 12 mm = approx. 4.5 mm
- Needle distance more than 14 mm = max. stroke

– Check the distance of the folding slides.

Correction

– Loosen the screws 3.
– Adjust the cylinder 4 correspondingly.
– Align the folding slides in parallel position.
– Tighten the screws 3.
– Check distance and parallelism of the folding slides once again.

3.5.2 Position of the folding slide when retracted

2 1

4 3

Caution: Risk of injury!

Switch the main switch off.

Check and adjust the folding slide only with the sewing unit switched off.

3

Standard and checking

When retracted the folding slide 2 must be located 0.5 mm behind the edge of main clamp 1.

– Check the position of the folding slide.

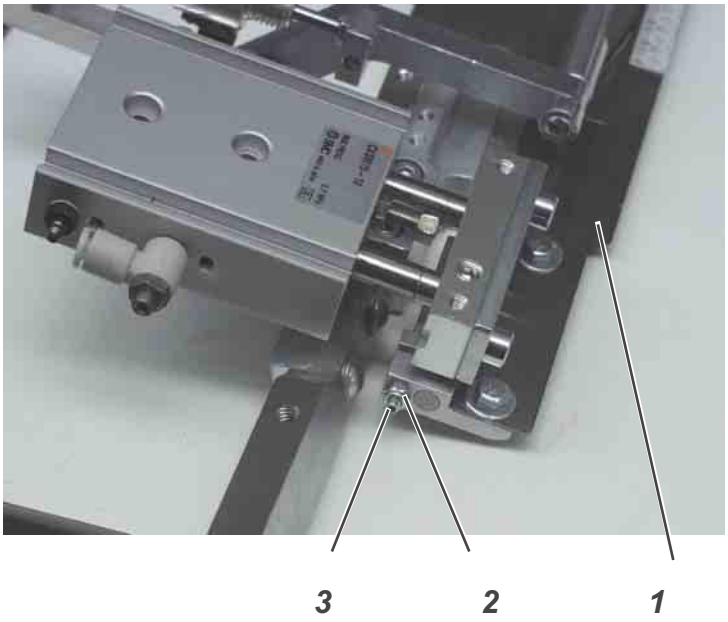
Correction

– Loosen counternut 3.

– Adjust the screw 4 in such a way that the folding slide 2 is located 0.5 mm behind the edge of main clamp 1.

– Tighten the screws 4.

3.5.3 Adapting the folding slide



Caution: Risk of injury!

Switch the main switch off.

Check and adjust the folding slide only with the sewing unit switched off.

Standard and checking

The rotation of the folding slide 1 must be guaranteed so that it can automatically adapt itself to the thickness of the material to be processed.
The folding slide 1 must have no axial backlash.

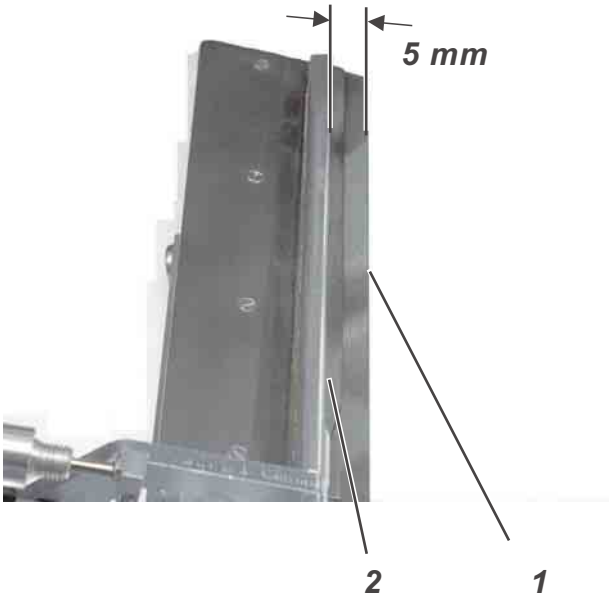
– Check the folding slide 1 in the holder for lateral clearance.

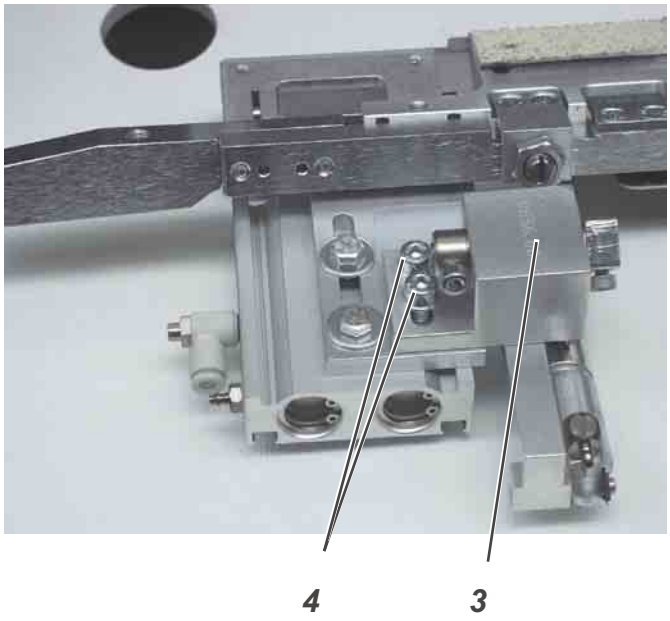
Correction

– Loosen the counternut 2.
– Adjust the folding slide with Allen screw 3 in such a way that there is neither clearance nor rough rotation.
– Tighten the counternut 2.

3.6 Flap clamp

3.6.1 Flap clamp position





Caution: Danger of injury!

Switch the main switch off.

Check and adjust the flap clamp only with the sewing unit switched off.

Standard and checking

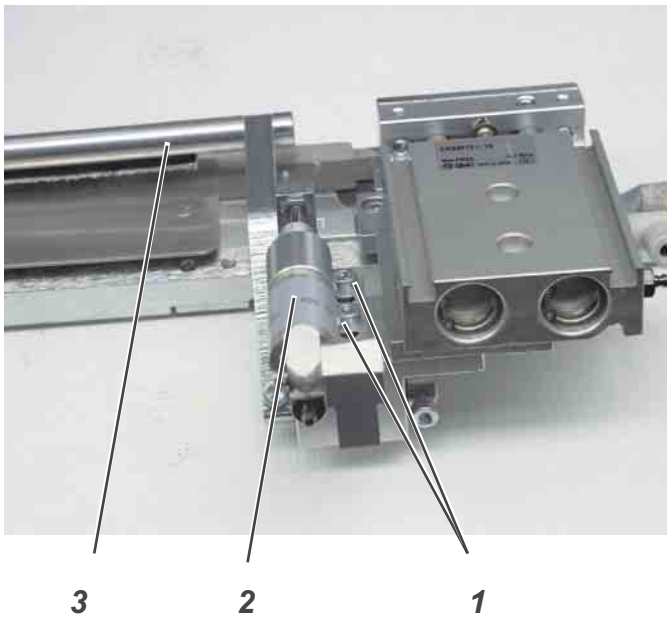
The flap clamps 2 must have a distance of 5 mm parallel to the inside of the main clamp 1.

– Close the flap clamp manually.
– Check the distance between flap clamp 2 and the inside of main clamp 1.

Correction

– Loosen the screws 4.
– Shift the flap clamp holder 3 correspondingly.
– Tighten the screws 4.

3.6.2 Opening stroke of the flap clamp



Caution: Risk of injury!

Switch the main switch off.

Check and adjust the flap clamp with utmost caution when the sewing unit is switched on.

Standard and checking

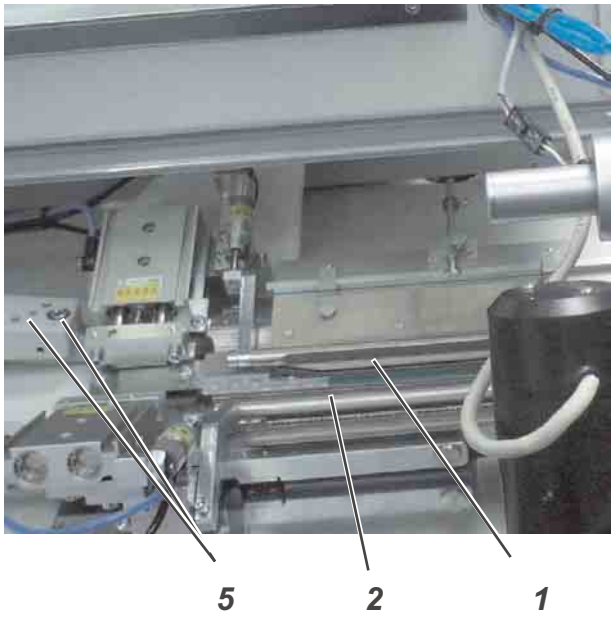
The opening stroke of the flap clamp 3 must be adjusted in such a way that the whole length of the flap clamp is pressed against the main clamp when the flap clamp cylinder 2 is extended.

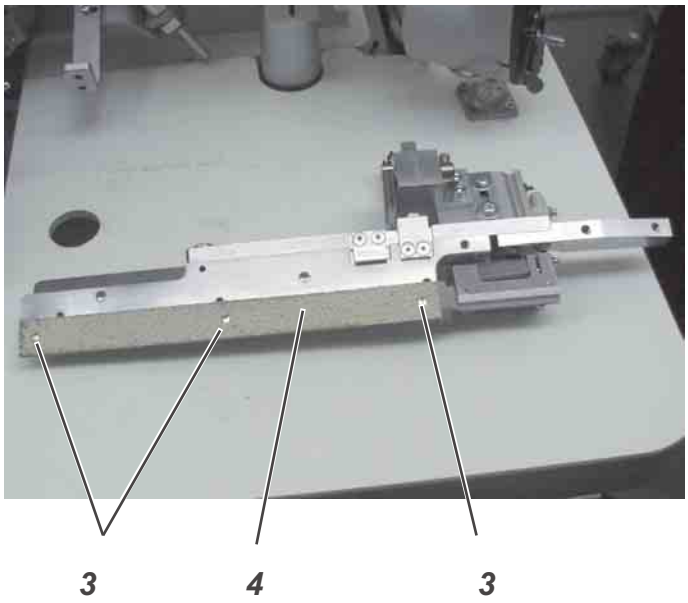
- Switch the sewing unit on.
- Close the flap clamp.
- Check whether the flap clamp is pressed against the main clamp over its whole length.

Correction

- Loosen the screws 1.
- Shift the cylinder 2 correspondingly.
- Tighten the screws 1.

3.7 Changing the rubber strips of the clamp





Caution: Risk of injury!

Switch the main switch off.

Dismount and mount the main clamp only with the sewing unit switched off.

3

Standard and checking

There are sponge rubber strips under the main clamps. In case of material processing problems the rubber strips should be checked and replaced, if required.

– Check the rubber strips.

Correction

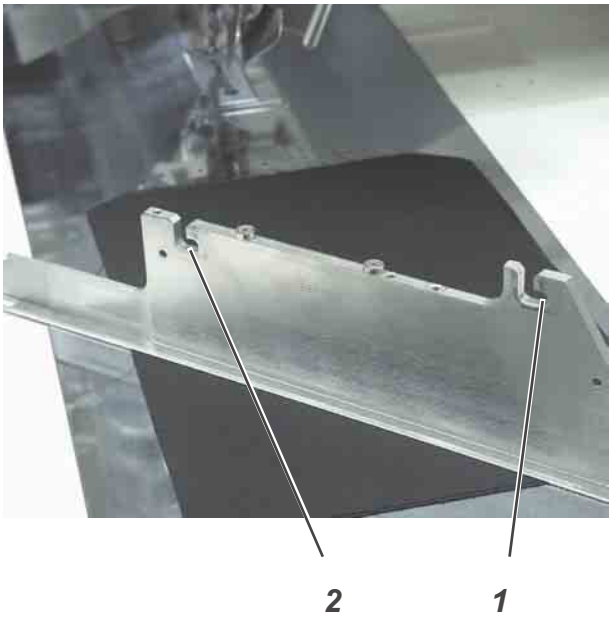
– Unscrew the screws 5.
– Take the clamp off.
– Unscrew the screws 3.
– Exchange the rubber strips 4 and tighten with the screws 3.
– Mount the clamp again.

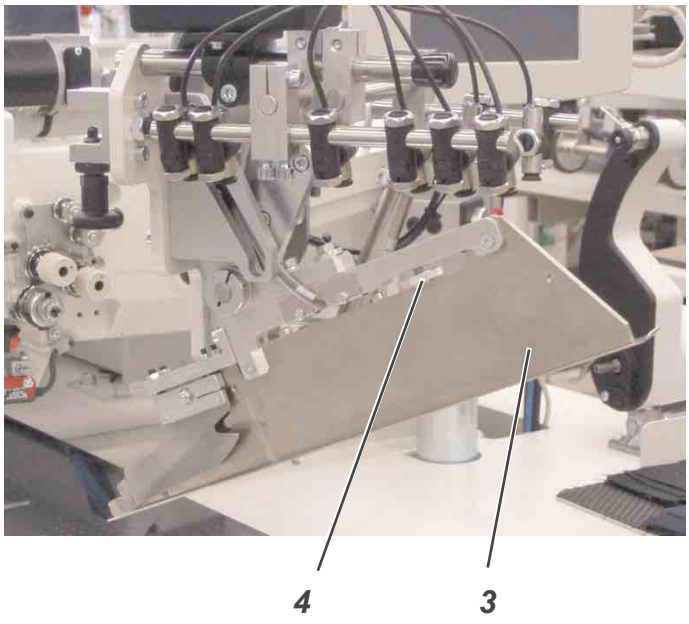
Note

When processing thick fabrics it is of advantage to equip the clamp with a thicker rubber strip or to fit an elevation.

4. Folder

4.1 Changing the folder





Caution: Risk of injury!

Switch the main switch off.

Dismount and mount the folder only with the sewing unit switched off.

Dismounting the folder

- Loosen the screw 4.
- Pull the folder 3 to the front out of the drill-holes 1 and 2.
- Cautiously remove the folder in downward direction.

Inserting the folder

- Insert the folder 3 in the holder with its fastening drill-holes 1 and 2 on top and push it to the very back.
- Tighten the screw 4.

4.2 Position of the folder to the needles and to the centre knife

Caution: Risk of injury!

Switch the main switch off.
Align the folder as to the needles and to the centre knife only with the sewing unit switched off.

Standard and checking

If the folder is fitted correctly, the following conditions must be fulfilled:

When the folder is lowered, the needles 4 must penetrate the needle holes 5 of the folder sole 1 unhindered and without being pushed aside.

When the centre knife 3 penetrates the centre knife protection 2, the hind edge of the knife must be flush with the knife protection.

- Make the machine pressureless.
- Press the folder down completely by hand.
- Check the position of the folder sole to the needles and to the centre knife.

Correction

- Make the machine pressureless.
- Press the folder 2 down manually.
- Loosen the screws 6 slightly.
- Align the folder 2 as to the centre knife and the needles.
- Tighten the screws 6.

Attention: Risk of breakage!

After adjusting the distance between the transport clamps and the folder sole has to be checked (see chapter “3.3 Distance between the transport clamps and the sole of the folder”)

4.3 Lifting motion of the folder

Caution: Danger of injury!

Switch the main switch off.
Adjust the lifting motion of the folder only with the sewing unit switched off.

Standard and checking

The distance between sliding sheet 2 and folder sole 1 has to be adapted to the material to be processed.

If the folder is adjusted too deep, the material is blocked.
If the folder is adjusted too high, the folding slides cannot fold the material.

When the folder is lowered

In this position there must be a clearance of 0.3 - 0.5 mm between the guide roller 4 and the lowest point of the guide groove 3.

When the folder is raised

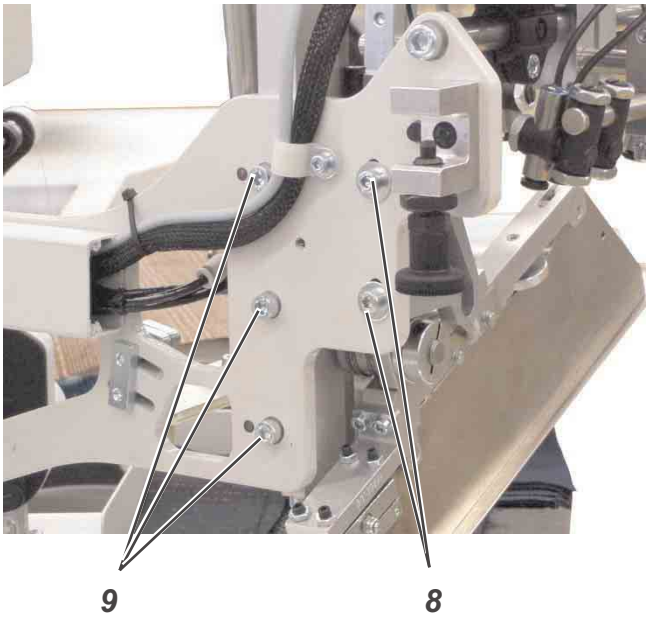
When the folder is raised, there must still be some clearance between the guide roller 4 and the highest point of the guide groove 3.

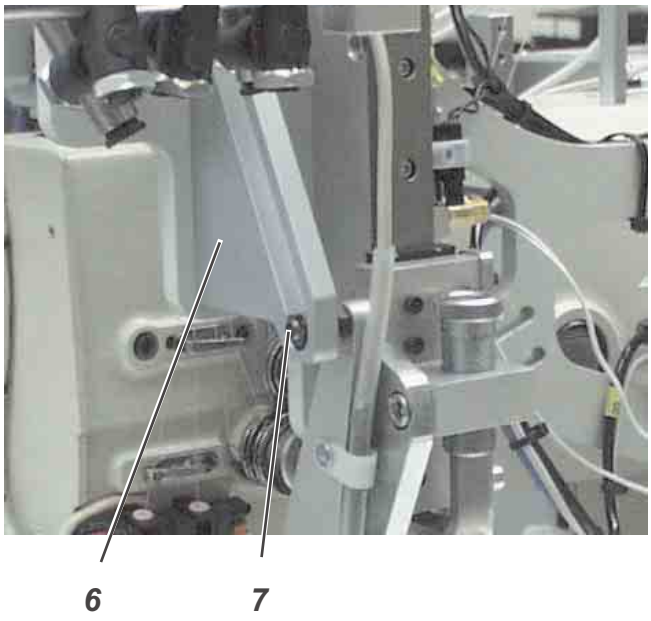
- Press the folder down to the fabric sliding sheet by hand.
- For this purpose turn the stop 6 back, if required.
- Check the air gap between guide groove 3 and guide roller 4.
- Lift the folder up to the upper stop 5.
- Check the air gap between guide groove 3 and guide roller 7.

Correction

- Adjust the rod end 5 on the piston rod of the cylinder.

If - with the folder lowered - the guide roller 4 hits the guide groove and the folder is not lowered as far as required, the guide groove has to be readjusted (see next page).

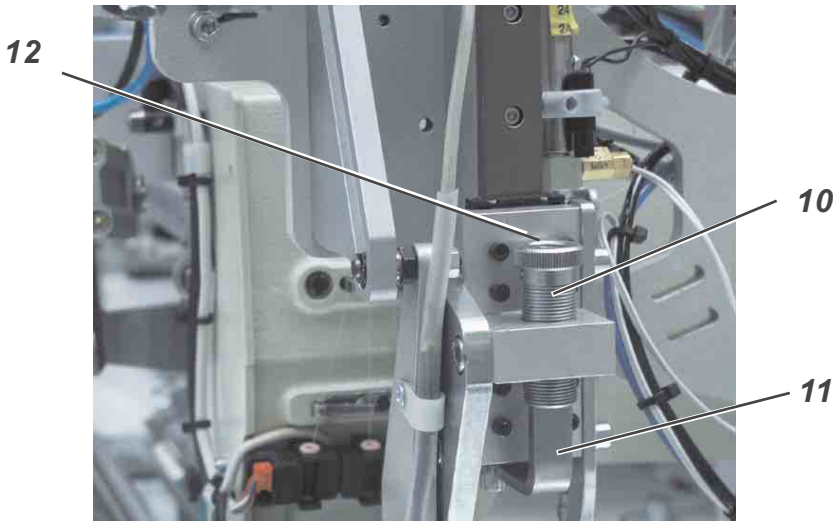




Caution: Risk of injury!

switch the main switch off.
Adjust the guide groove for the folder only with the sewing unit switched off.

– Loosen the screws 8 and 9.
– Shift the cam segment 6 in the slotted holes.
– Tighten the screws 8 and 9.



Stop screw with spring

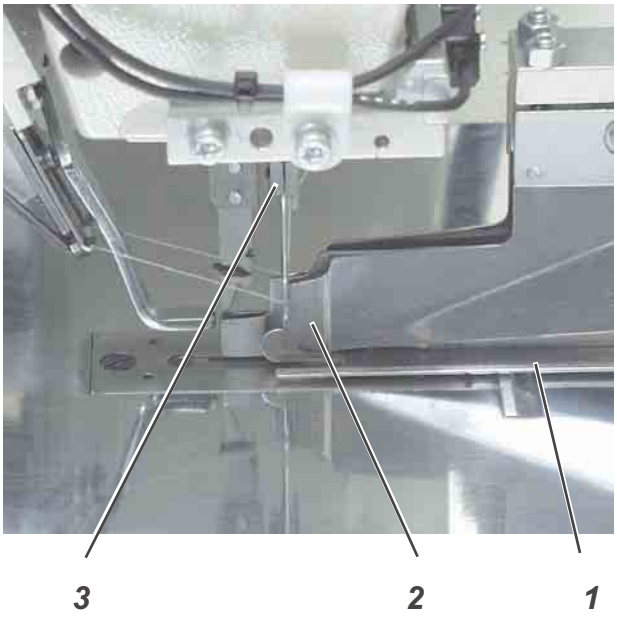
Standard and checking

The stop screw 10 has to be adjusted in such a way that - with the folder lowered - the distance between the folder sole and the sliding sheet amounts to approx. 1 - 2 mm (dependent on the fabric).

The integrated spring presses the folder back so that the piping strip is safely seized when sewing (during the last section of the backward movement the cylinder is pressureless).

– Turn the stop screw 10 in such a way that - if the folder is lowered - the stop screw 10 abuts on the stop 11 (make sure that it snaps in).
– Adjust the spring pressure with screw 12 in the stop screw 10 so that the folder is pressed back.

4.4 Guide plates at the folder



Caution: Risk of injury!

Switch the main switch off.

Adjust the guide plates only with the sewing unit switched off.

Standard and checking

The lateral distance between the guide plates 2 and the needles should be as small as possible. However, the guide plates must not abut on the needles or the needle holders 3 because this may lead to a high noise level, damage to the guide plates and the needle head as well as to thread breakage.

The distance between the sole top 1 and the bottom of the guide plate 2 should not exceed 0.5 mm.
Only when processing especially thick materials the distance has to be increased.

– Lower the folder.
– Check the position of the guide plates as to the needles.

Correction

Aligning the guide plates

– Cautiously align the guide plates by means of a flat pliers.

Adjusting the height of the guide plates

– Loosen the counternuts 4 and 5.
– Adjust the distance of the guide plates 2 with the Allen screws.
– Tighten the counternuts 4 and 5.

Pressure of the guide plates

The spring pressure has to be adjusted in such a way that both plates are always pressed down safely.
If the pressure is too low, the needles may break during the initial bartack.

If the pressure is too high, the flap or the additional parts are pushed back at the seam beginning.

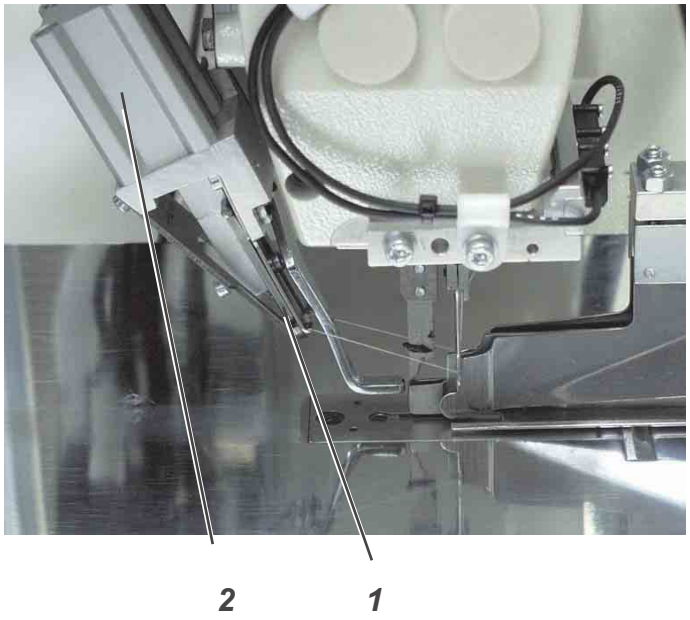
If the pressure is too low, the material may be lifted, the stitch formation may be incorrect or the needles may break.

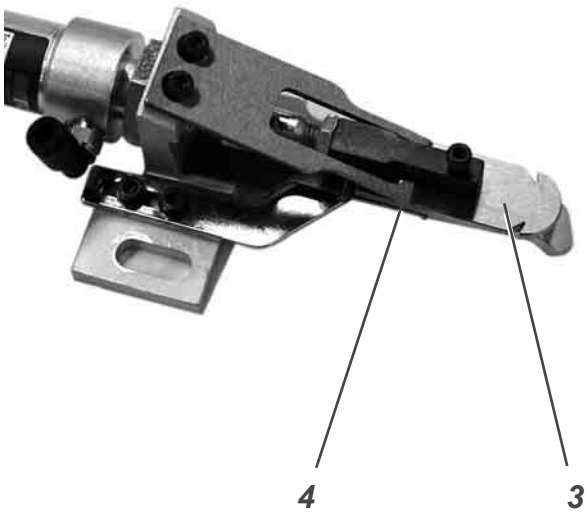
Adjusting the pressure of the guide plates

– Loosen the counternut 7.
– Adjust the pressure on the guide plate with the Allen screw 6.
– Tighten the counternut 7.

5. Trimming and clamping device for the needle threads

5.1 Function





Caution: Risk of injury!

Switch the main switch off.

Check knife and thread catcher only with the sewing unit switched off.

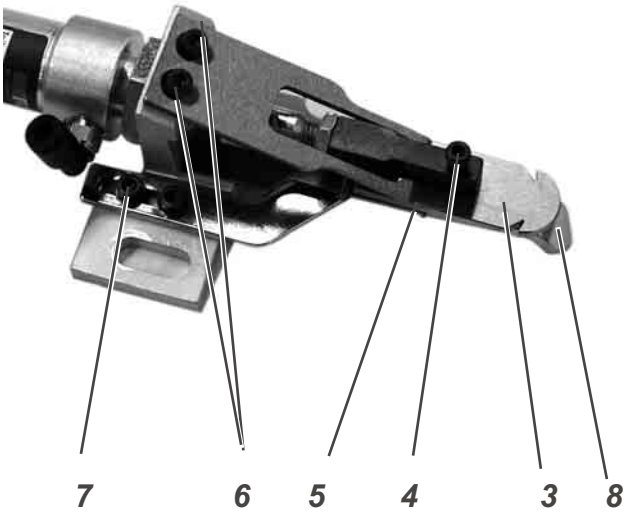
Function

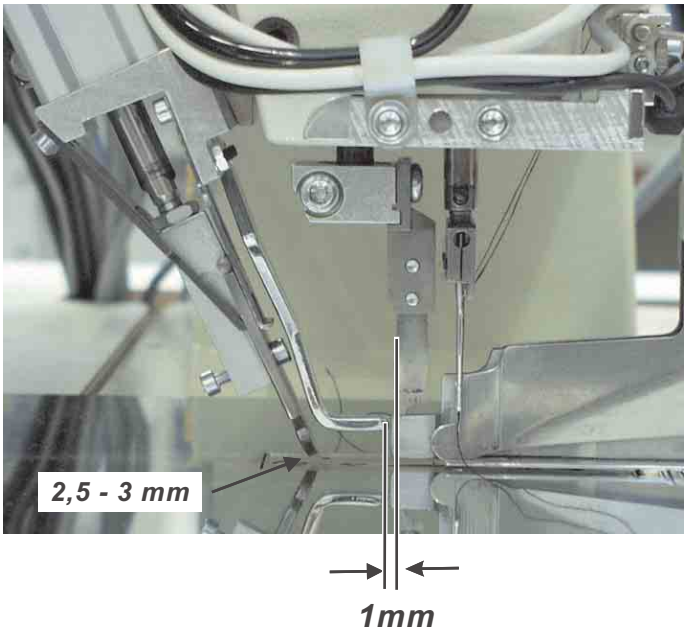
- The cylinder 2 is switched on after the seam end and during the feed to the corner knives.
  The thread catcher 3 lowers and takes the needle threads up.
- After a preset time the thread catcher shoots up.
  The needle threads are clamped at the clamping piece 1 and cut off by knife 4.
- After the first stitches of the next seam the clamped needle threads are released.
- By means of the springy clamping sheet 1 the thread catcher 3 abuts flat on the knife 4. Thus, the knife is automatically in parallel position.

Function check

- Call up the adjustment and test program **“Selecting the output elements”** (see programming instructions chapter 5.6.1 Multitest).
- Select the output element “**Y1**”.
- Pull the needle threads to the back.
- Switch the output element on and off by pressing the function key “**OK**”.
- Check whether the threads are accurately cut and clamped.

5.2 Exchanging and adjusting knife and thread catcher

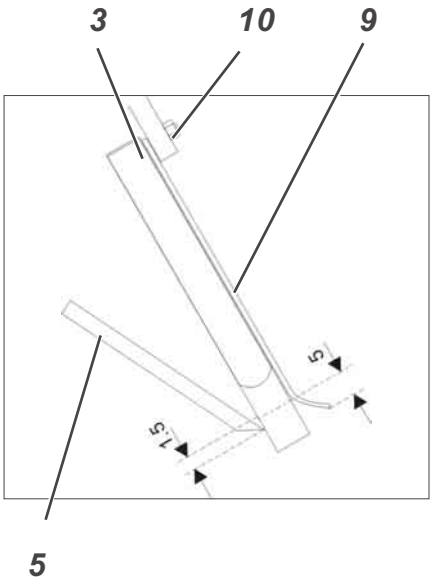




Caution: Risk of injury!

Switch the main switch off.

Exchange knife and thread catcher only with the sewing unit switched off.

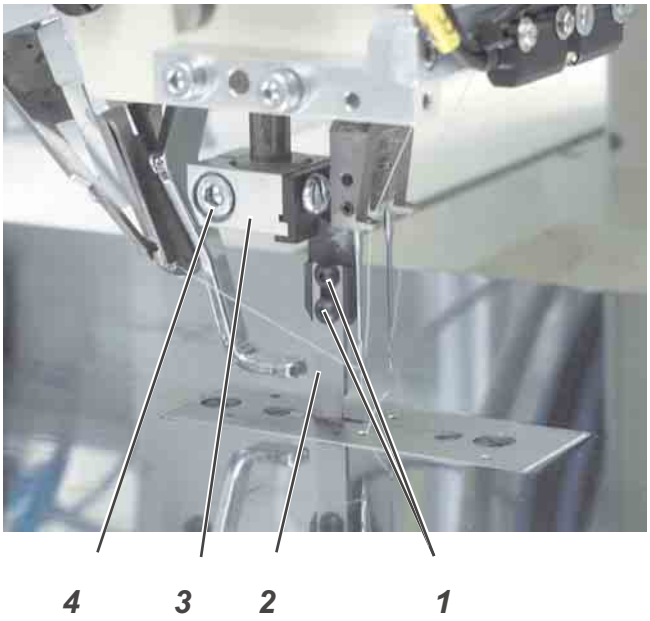


Exchanging knife and thread catcher

- Screw off the complete thread catcher from the machine head.
- Unscrew the screws 6.
- Remove knife 5.
- Unscrew screw 7 and remove knife protection 8.
- Unscrew screw 4 (on the rear).
- Take off the needle thread catcher 3.
- Insert new thread catcher and tighten with screw 4.
- Put on new knife 5 and tighten with screws 6.
  Set the dimensions 2.5 - 3 mm and 1.5 mm.
- Make a cutting and clamping test. Adjust the clamping pressure by means of screw 10, if required.

6. Centre knife

6.1 Position of the centre knife



Caution: Danger of injury!

Switch the main switch off.

Disconnect the sewing unit from the pneumatic system.

Adjust the centre knife only with the sewing unit switched off.

Standard and checking

In the bottom dead centre the front edge of centre knife 2 must stand approx. 1 mm under the cutting edge of the stationary knife in the throat plate.

The centre knife 2 should be in parallel position to the counterknife in the throat plate.

The center knife 2 must abut on the stationary knife in the throat plate with a slight pressure.

– Move the centre knife 2 to the bottom dead centre.
– Check whether the edge of knife 2 is max. 1 mm under the stationary knife.

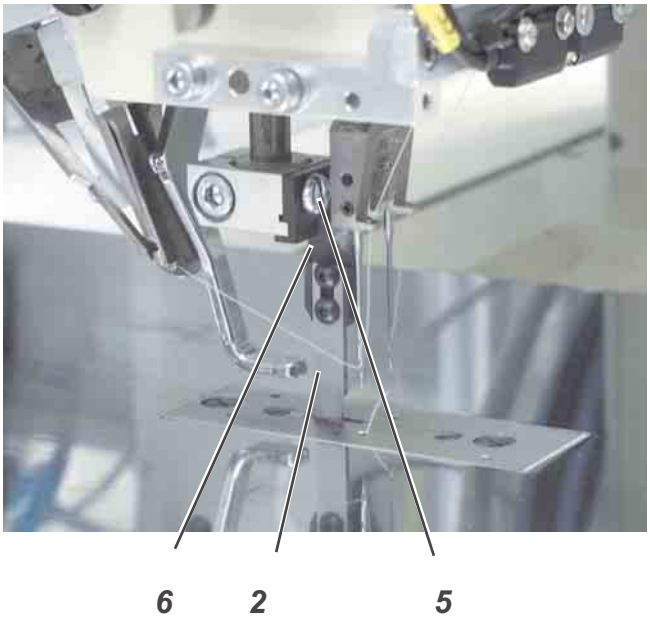
Correction

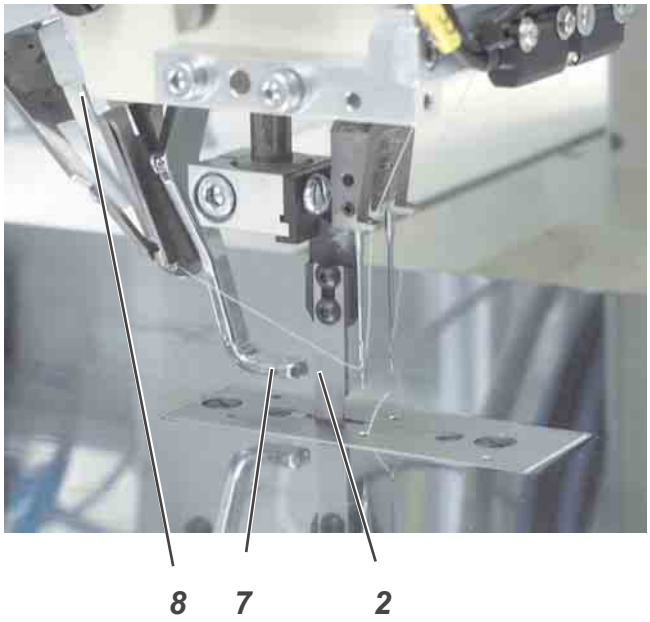
Adjusting the height of the knife

– Move the centre knife to the bottom dead centre.
– Loosen screws 1.
– Adjust the height of centre knife 2.
– Tighten screws 1.

Adjusting the knife holder

– Move the centre knife to the bottom dead centre.
– Loosen screw 4.
– Turn the knife block 3 in such a way that the centre knife is in parallel position to the knife in the throat plate.
– Tighten screw 4.





Contact pressure

– Loosen the two screws 5.
– Place the knife holder 6 with the centre knife 2 to the left against the stationary knife in the throat plate.
  The centre knife must abut with slight pressure.
– Tighten the screws 5.

– Make a cutting test.

Attention !

Disturbances of the machine cycle may occur.

If the centre knife abuts too close on the counterknife edge, the spring cannot pull it to the initial position any more after the sewing process. Furthermore, the knife will quickly get blunt which may result in inaccurate cutting, different seam lengths, inexact corner incision and fullness within the seam.

6.2 Needle protection

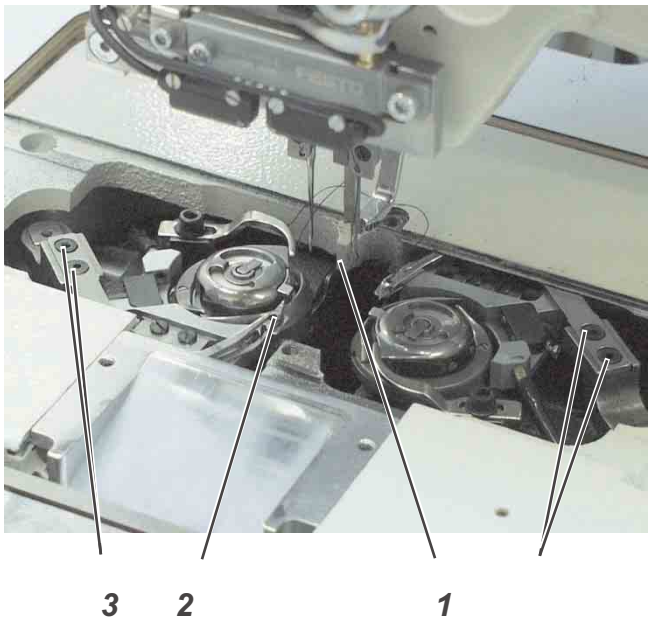
The needle protection 7 is fixed on the holder of the needle thread catcher.

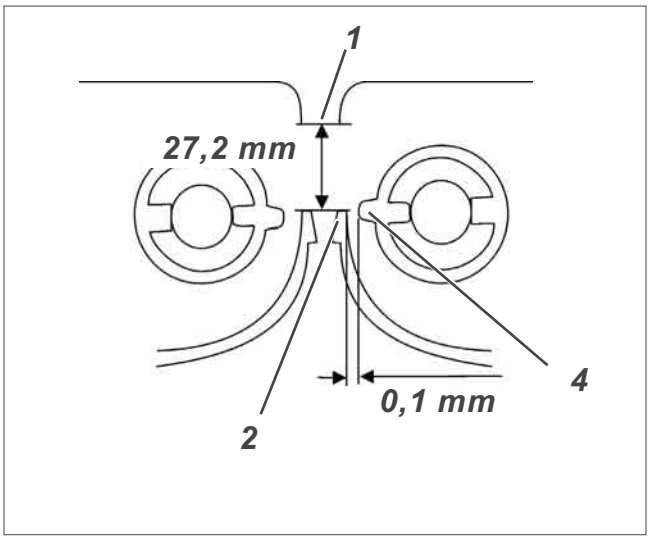
It should be located 1 mm deeper than the point of the centre knife 2 and
1.0 - 1.5 mm from its back.

– Loosen the screws 8.
– Adjust the needle protection 7 in such a way that it is located 1 mm deeper than the point of the centre knife und 1.0 - 1.5 mm from its back.
– Tighten the screws 8.

7. Adjusting the bobbin thread catcher

7.1 Thread catcher





Caution: Risk of injury!

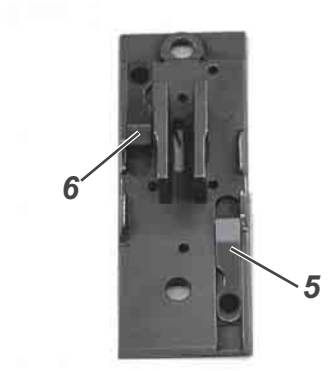
Switch the main switch off.

Adjust the bobbin thread catcher only with the sewing unit switched off.

Standard and checking

The thread catchers are correctly adjusted if the thread catcher point 2 in idle state has a distance of 27.2 mm to the edge 1 and a distance of 0.1 mm to the nose of bobbin case 4.

- Swivel the thread catcher out.
- Check whether the point 2 has a distance of 27.2 mm to the edge 1.
- Check whether there is a distance of 0.1 mm between the thread catcher and the nose of the bobbin case 4.



Correction

- Loosen the screws 3.
- Adjust the thread catcher 2 correspondingly.
- Tighten the screws 3.

Counterknife

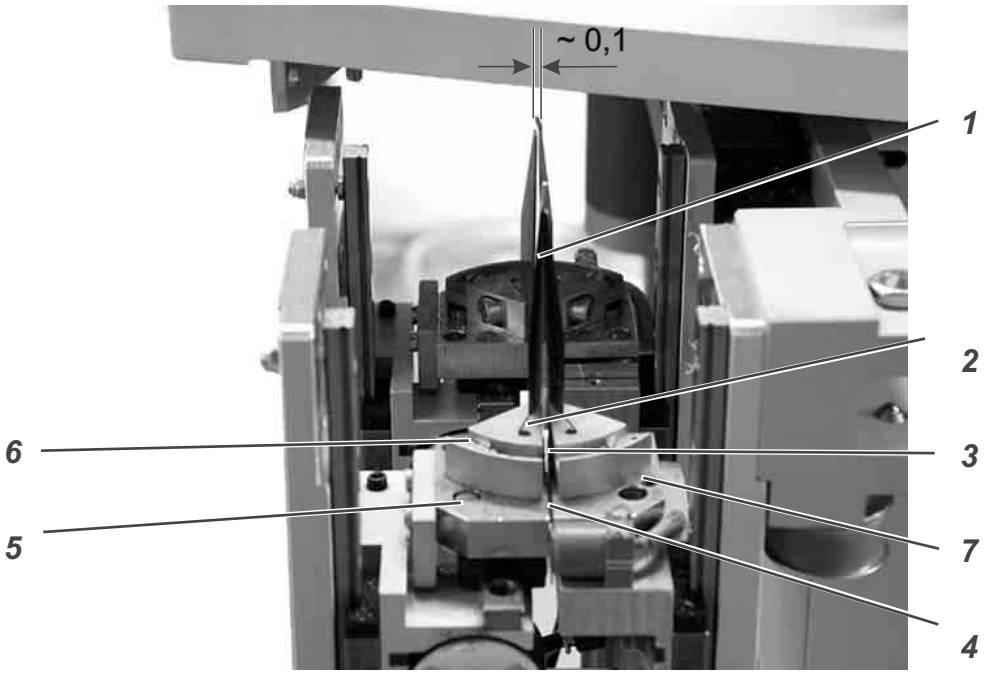
- Regrind or exchange the blunt counterknives 5 and 6.

8. Knives for corner incision

Caution: Danger of injury!

Do not reach into the area of the corner knives.
The corner knives shooting up can cause severe cuts.
Carry out adjusting operations with utmost caution when the sewing unit is running.

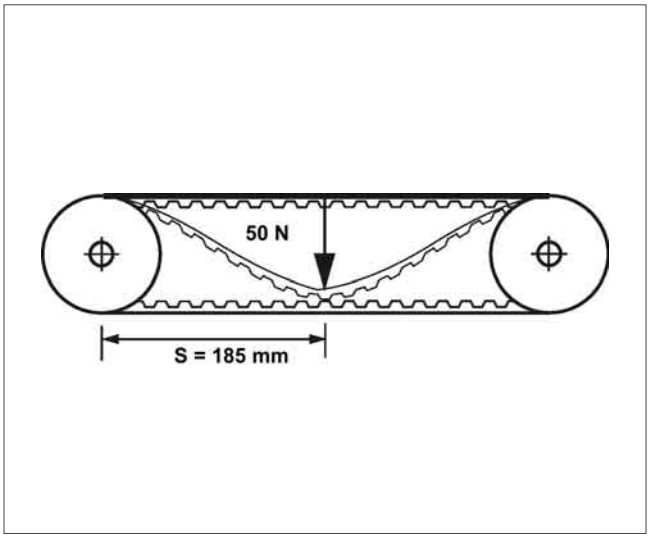
8.1 Presetting



In order to be able to precisely adjust the position of the corner knives 1 all four corner knives are brought to a basic position at first.

- Loosen screw 6.
- Turn the corner knife holder 2 in such a way that the face side 3 is in a line with the face side 4 of the knife support 5.
- Tighten screw 6.
- Adjust the other three knife holders as described.
- Adjust the grub screw 7 in such a way that the edges of the opposite knives have a distance of 0.1 to 0.3 mm.
- Grub screw 7 to the right: knives closer together.
- Grub screw 7 to the left: knives wider apart.
- Adjust the other knives likewise.

8.2 Belt tension



Standard and checking

Over half the tightening length S = 185 mm the toothed belt 1 must bend under the test load FV = 50 N so that the loaded belt just touches the other belt.

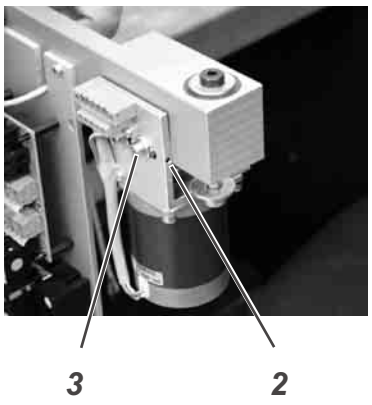
Consequences of a too high toothed belt tension

- Reduced durability
- Noisy running

Consequences of a too low toothed belt tension

- No faultless mesh between belt teeth and disc toothing
- The teeth may skip over under load
- Non-uniform corner stitches

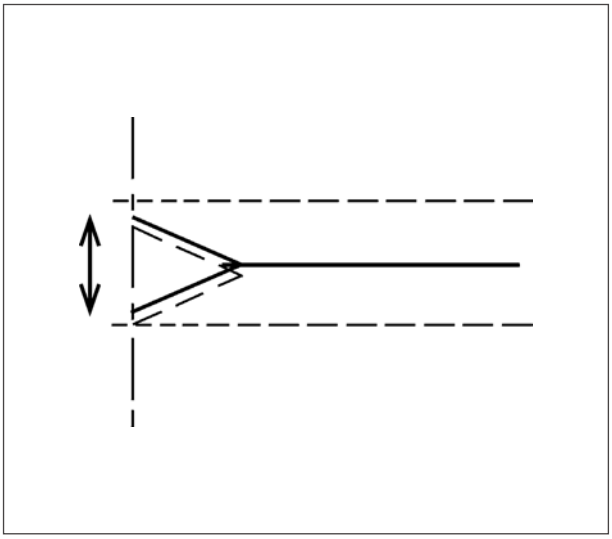
- Check the belt tension with a spring balance.



Correction

- Loosen the counternut 3.
- Adjust the belt tension with the eccentric screw 2.
- Tighten the counternut 3.

8.3 Aligning the corner knife station as to the seams



Caution: Risk of injury!

Switch the main switch off.
Adjust the corner knife station only with the sewing unit switched off.

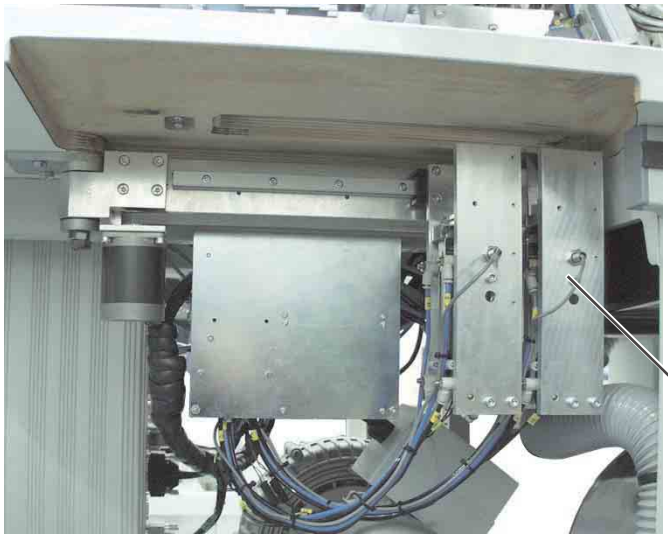
Standard checking

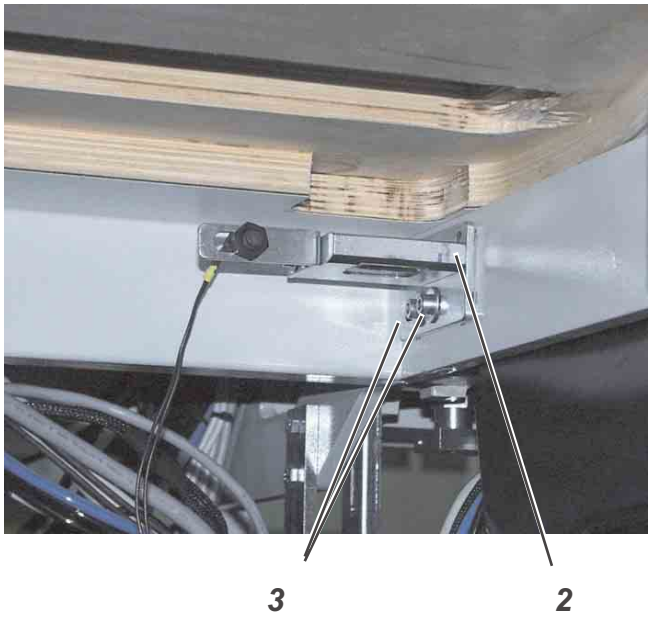
The corner incisions must be symmetrical to the seams.

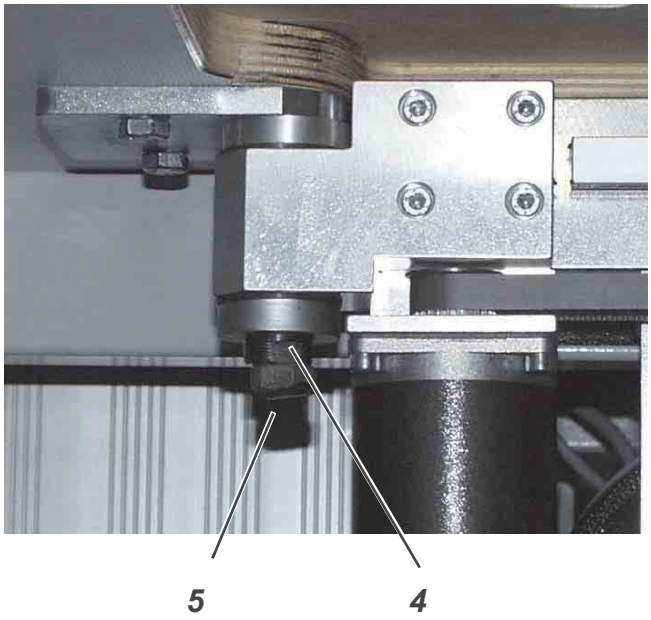
- Set the maximum sewing length at the control.
- Iron a piece of interfacing on a workpiece.
  Thus the corner incisions are better visible.
- Make a test seam.
- Check seam and cutting pattern.

Correction of the corner incision at the seam end

- Swivel the corner knife station 1 out completely.







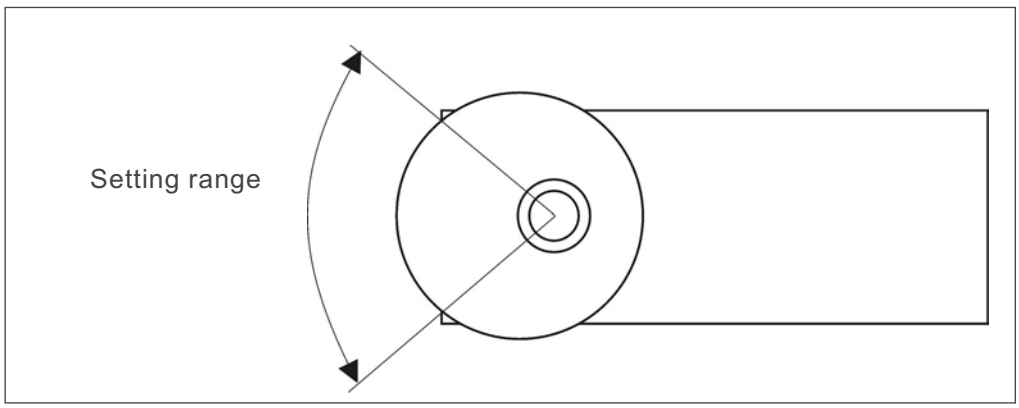
- Loosen the screws 3 slightly.
- Shift the holder 2 correspondingly.
- Tighten the screws 3.
- Swivel the corner knife station back again.

Correction of the corner incision at the seam beginning

- Loosen the screw 5 slightly.
- Adjust the corner knife station with the hexagon screw 4.

ATTENTION !

Observe the position of the eccentric.



- Tighten the screw 5.
- Make a test seam.
- Check seam and cutting pattern.

8.4 Adjusting the slant of the corner incisions

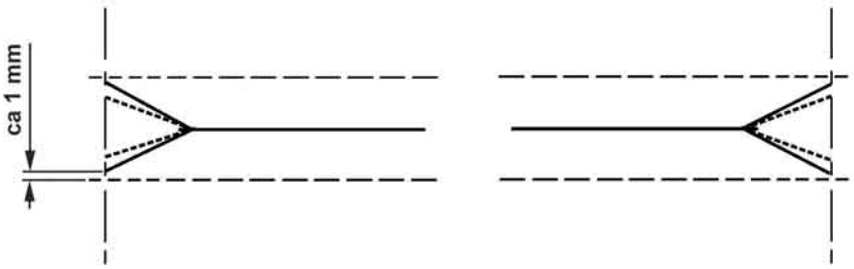
Caution: Risk of injury!

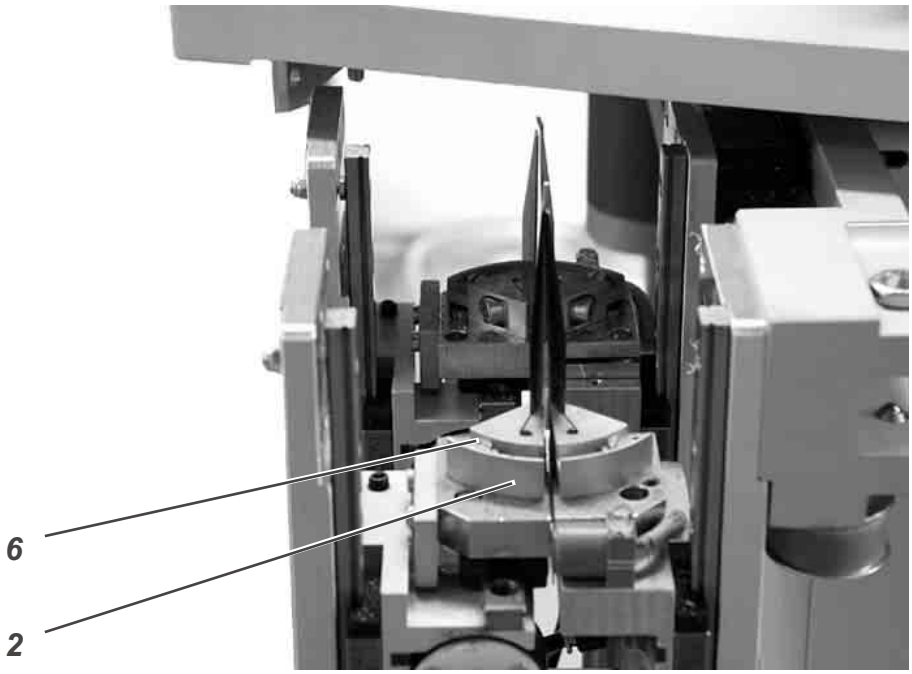
Switch the main switch off.
Adjust the corner knives only with the sewing unit switched off.

Standard and checking

The incisions of the corner knives should be as close to the seam as possible (approx. 1 mm), but must not cut it.

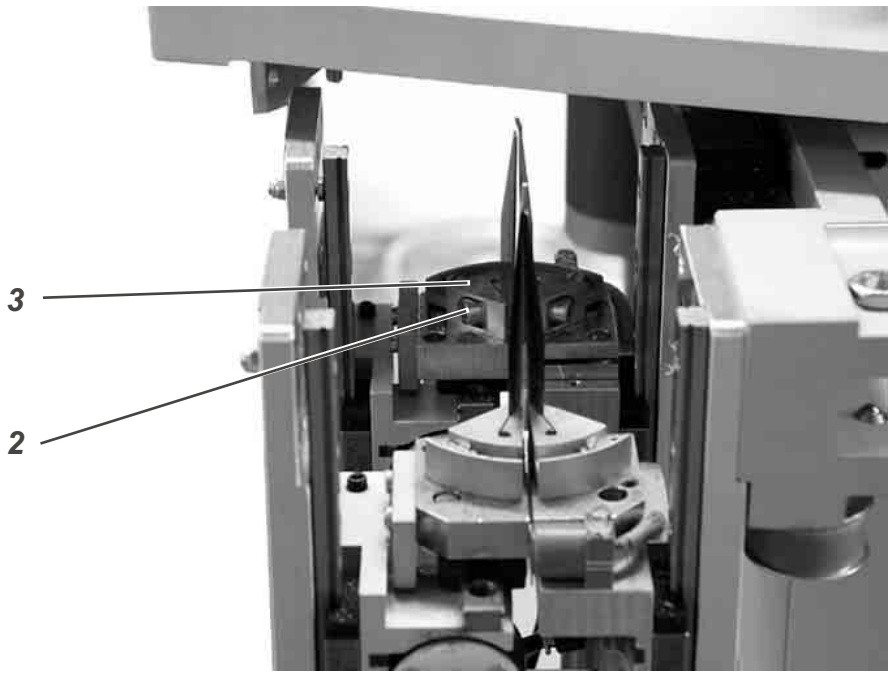
- Set the maximum sewing length at the control.
- Sew a test seam.
  It is advisable to iron a piece of interfacing on the workpiece before. Thus the corner incisions are better visible.
- Check seam and cutting pattern.





- Loosen screw 6.
- Adjust the corner knife holder 2 correspondingly.
- Tighten screw 6.
- Adjust the other three knife holders according to the seam pattern.

8.5 Exchanging the corner knives



Caution: Risk of injury!

Switch the main switch off.
Exchange the corner knife station only with the sewing unit switched off.

Risk of cuts.
Do not reach into the sharp edges of the corner knives.

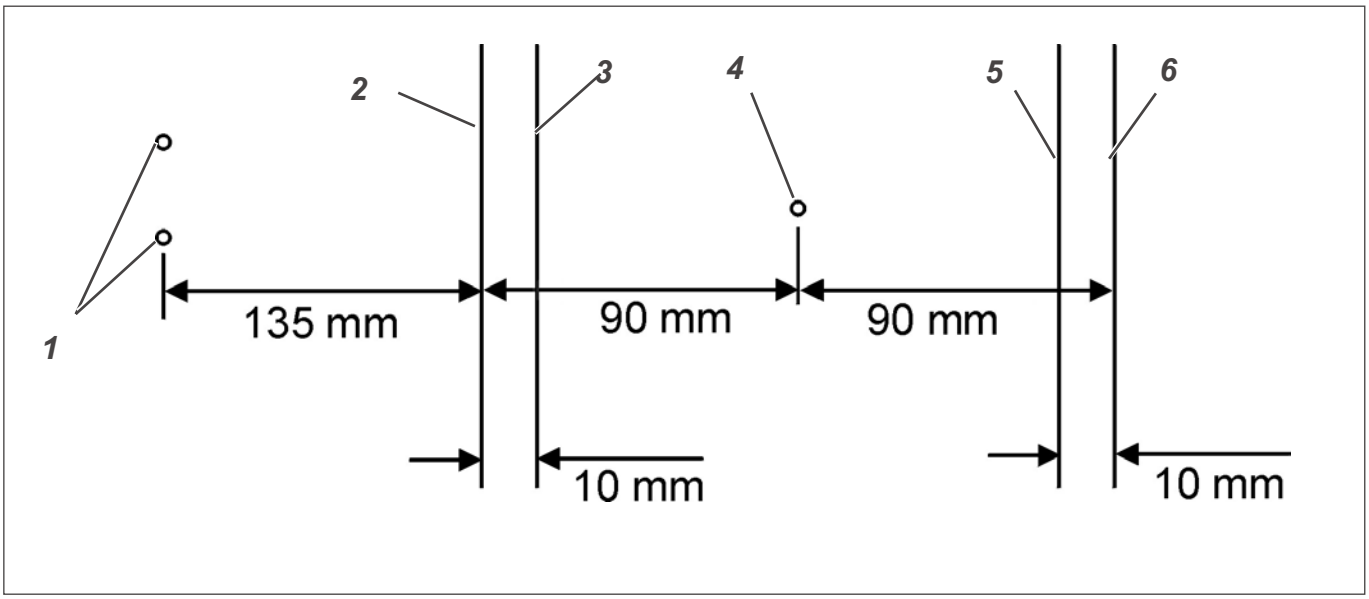
Blunt knives are to be exchanged against a set of knives included in the accessories.

- Swivel the corner knife station out.
- Loosen screw 2.
- Remove the old corner knife.
- Insert a new corner knife in the knife holder 3.
- Tighten screw 2.
- Swivel the corner knife station in again.

9. Laser markings

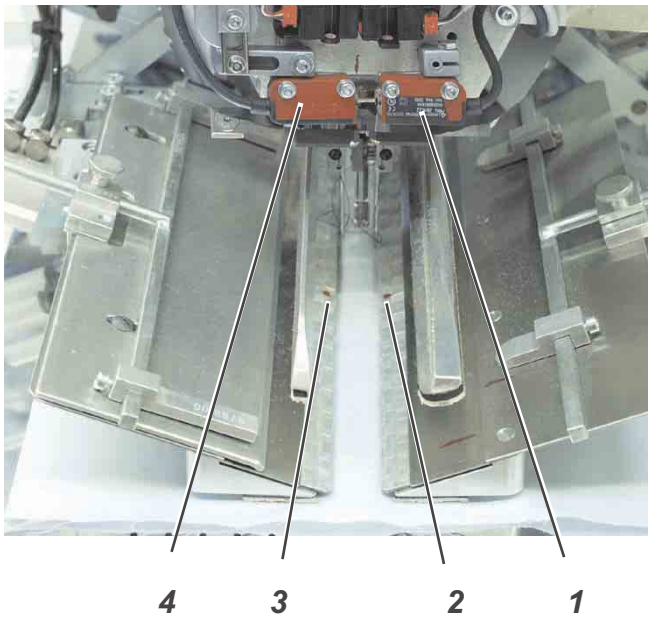
According to the equipment the 100-68 is provided with 6 lasers for marking the positioning points.

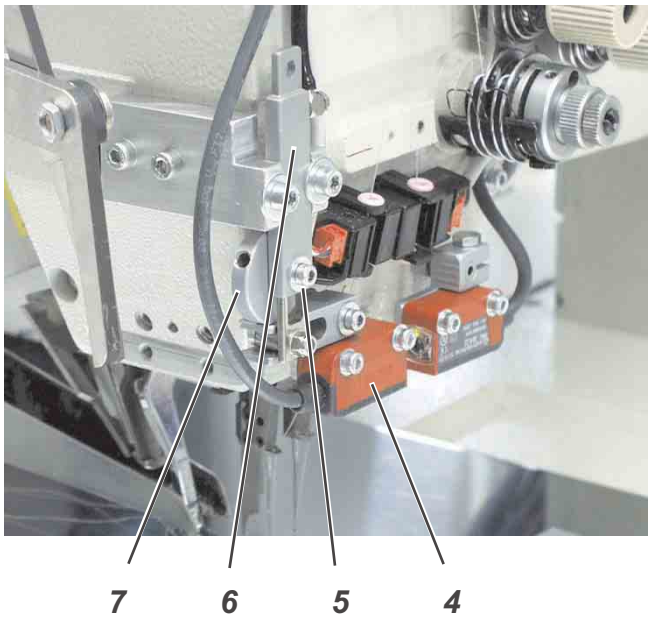
The following values are basic values:



1 : Needles
2 : Marking of the front positioning point
3 : Auxiliary positioning line for the production of men's jackets
4 : Marking of the central positioning point
5 : Auxiliary positioning line for the production of men's jackets
6 : Marking of the rear positioning point

10. Photocells for flap scanning





Caution: Risk of injury!

Switch the main switch off.
Adjust the reflected light barriers only with the sewing unit switched off.

Standard and checking

The light spots 2 and 3 of the photocells 1 and 4 must shine on the reflected foils of the main clamp.

The light spots must hit the reflected foil approx. 1.5 - 2 mm from the outside edge.

– Check whether the light beam of the photocells shines on the reflected foil.

Correction

– Loosen the screws at the photocell.
– Adjust the photocell.
– Tighten the screws at the photocell.

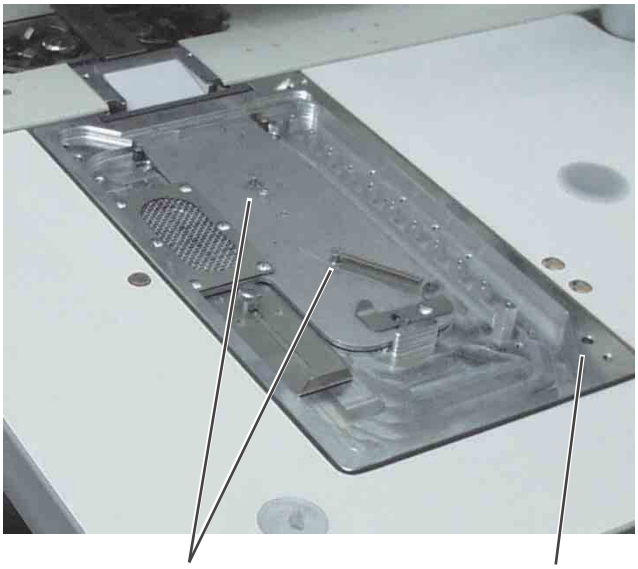
Correction of left light barrier for breast welt pocket

As far as sewing units for breast welt pockets are concerned, the left light barrier 4 is automatically set to the correct position by the cylinder 6 when selecting a breast welt program.

– Select the breast welt program.
– Position the breast welt.
– Loosen screw 5.
– Adjust the light barrier with the eccentric 7 to match the breast welt.
– Tighten screw 5.

11. Fabric sliding sheet and vacuum plate

11.1 Adjusting the height of the vacuum plate



Standard and checking

The vacuum plate should be on one level with the table top.

– Lift the fabric sliding sheets 1 at the front and swivel them to the left.

– Check the height of the vacuum plate as to the table top.

Caution: Risk of injury!

Switch the main switch off.
Adjust the vacuum plate only with the sewing unit switched off.

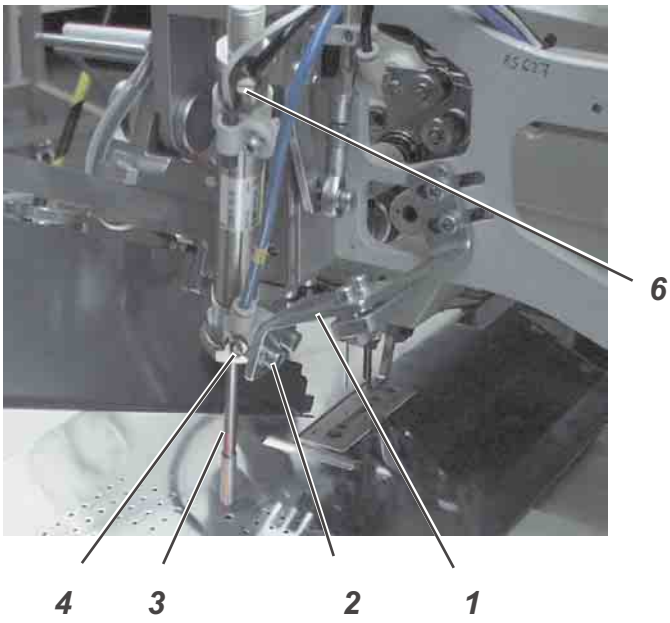
The vacuum plate is connected with the table top support by four core pins 2.

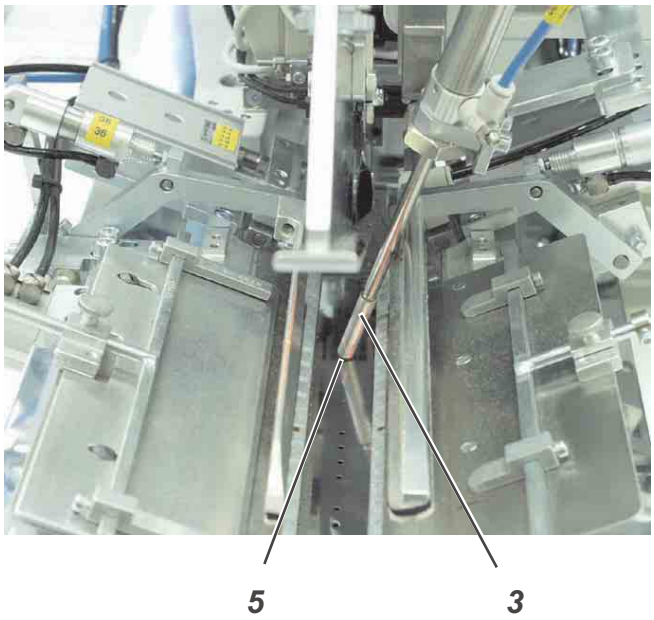
– Turn the core pins 2.
  In clockwise direction = vacuum plate higher
  Counter-clockwise = vacuum plate lower

– Readjust the support screws 3.

12. Adjusting the optional equipment

12.1 Downholder





With the downholder the fullness in the pocket opening area caused by darts is smoothened and safely held.

Caution: Risk of injury !

Switch the main switch off.
Check and adjust the downholder only with the main switch switched off.

Standard

The downholder 3 should be aligned in such a way that it lowers exactly on the drill-hole 5 in the sliding sheet.
It must be aligned in such a way that it is not hit by the opened clamps.

Adjusting the downholder

- Loosen the screws 2 at the holder 1.
- Adjust the height of the downholder 3.
  When the pedal is actuated, the extended piston rod should just touch the hole in the fabric sliding sheet.
- Align the downholder 3 to the back (in machine head direction).
  The piston rod should hold the hind trousers part clamped.
- Tighten the screws 2 on the holder 1.
- Regulate the lowering speed of the downholder 3 with the throttle valves 4 and 5.
  The lowering motion should be rapid, but not abrupt.

12.2 Ejector roller

In the production of trousers the ejector roller is used separately.
In the production of men's jackets it is used in combination with the throw-over stacker.

The transport rollers 1 and 2 convey the workpiece to the opening of the throw-over stacker so that it is safely stacked.

Caution: Risk of injury!

Switch the main switch off.

Adjust the ejector roller only with the main switch switched off.

The transport rollers must be aligned in parallel position to the table top and the centre of the pocket opening.

Adjusting the height of the transport rollers

In lowered position both transport rollers 1 and 2 should equally rest on the table top.

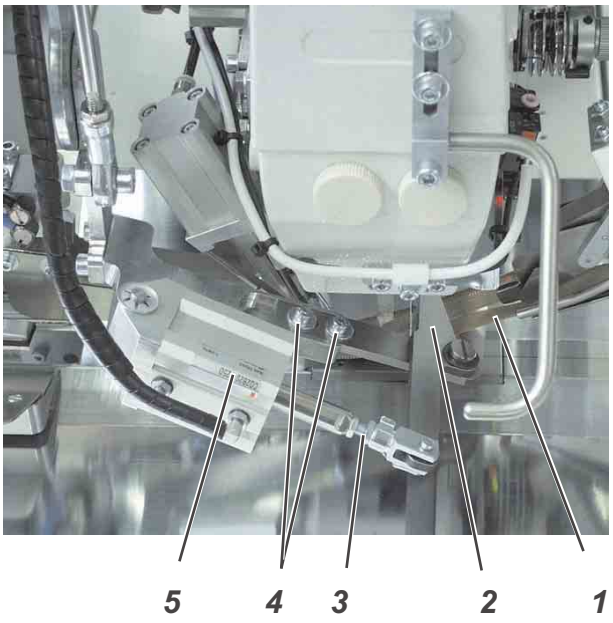
- Loosen screw 4.
- Shift the operating lever 5 in such a way that both rollers rest on the table top with slight pressure.
- Tighten screw 4.

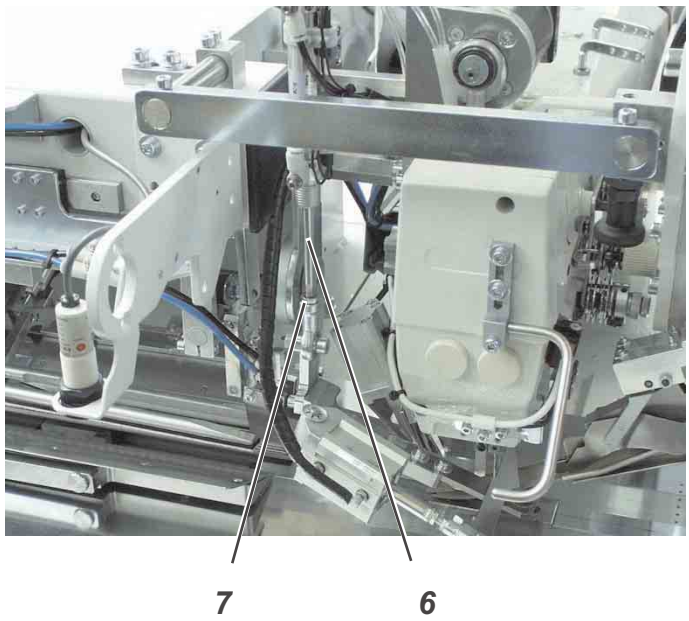
Adjusting the throttle valves

- Adjust the lowering and lifting speed at the throttle valves 1 and 2.
  The lowering speed should be rapid, but not abrupt.
  Throttle valve 1 = lowering speed
- Throttle valve 2 = lifting speed

12.3 Zipper scissors

12.3.1 Adjusting the scissors





The zipper scissors 2 is used for cutting endless zippers to length. Cylinder 6 swivels the scissors down; cylinder 5 actuates the scissors.

Caution: Risk of injury !

Switch the main switch off.

Check and adjust the zipper scissors only with the main switch switched off.

Standard

The scissors 2 must swivel in so far that both zipper parts 1 are cut.

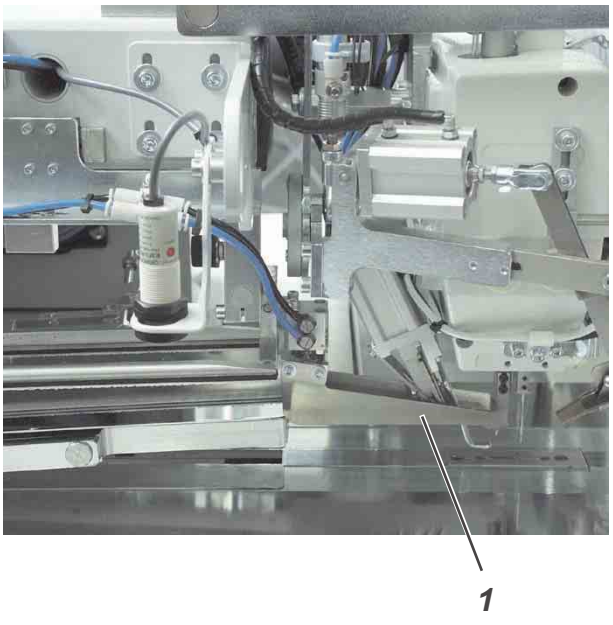
The farther the zipper parts are within the scissors, the lower is the wear and tear of the scissors parts.

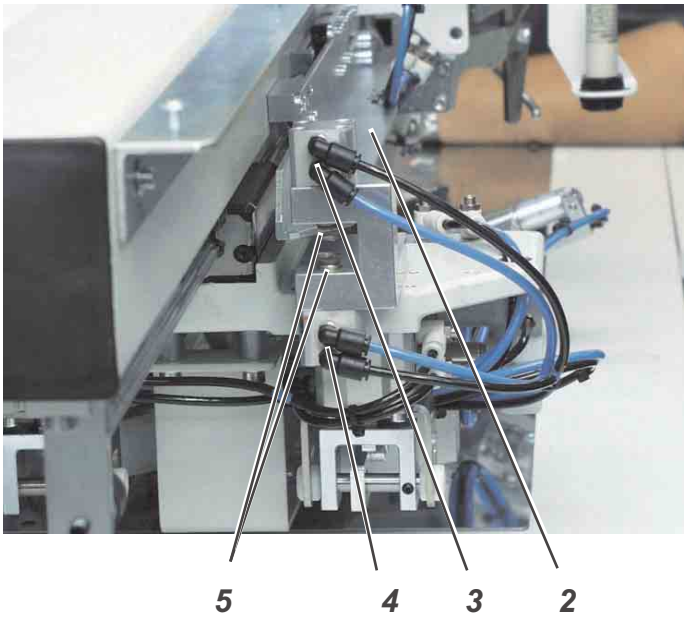
When swivelled in the scissors must not touch the needles.

Adjusting the scissors

- Loosen counternut 7.
- Press the scissors 2 down manually and adjust it with the piston rod 6 in such a way that the scissors is in parallel position to the support sheet.
- Tighten counternut 7.
- Loosen screws 4.
- Adjust the distance between scissors and needles.
- Tighten screws 4.
- Adjust the piston rod 3 of cylinder 4 in such a way that the closed halves of the scissors overlap slightly when the cylinder is extended.

12.3.2 Adjusting the carriers for zipper parts





The carriers 1 support the feed of the two zipper parts.

Caution: Risk of injury !

Switch the main switch off.

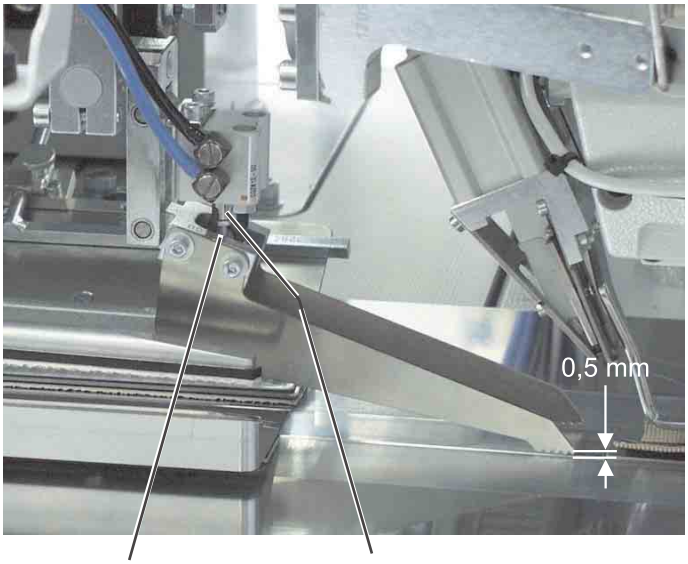
Check and adjust the carriers only with the main switch switched off.

Standard

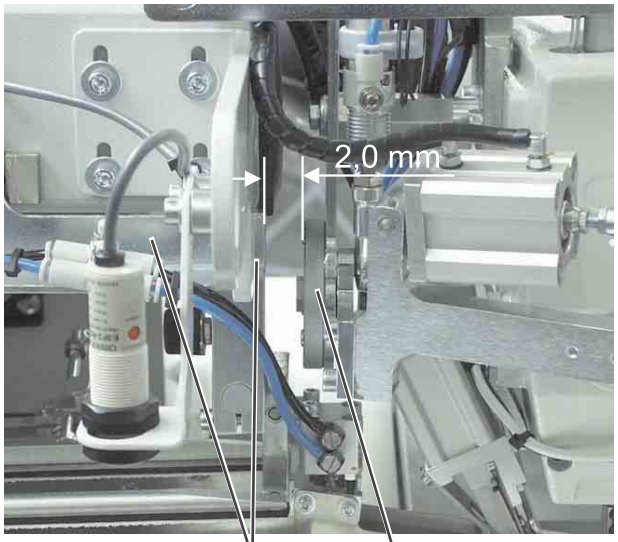
During the feed the two carriers 1 should rest on the zipper parts centrally and with equal pressure.

The buffers 5 of the carriers have to be extended by the cylinders 3 and 4 so far that the guide rail 2 is transported without slippage.

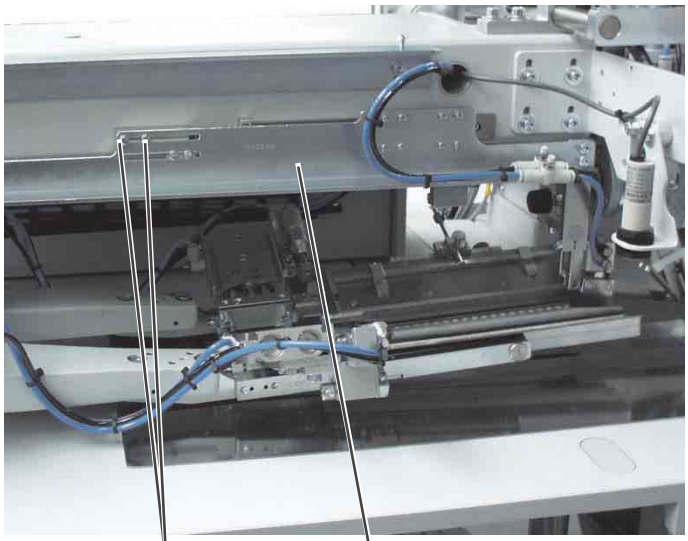
3 2 1



5 4



7 6



8 7

10 9

Parallelism of the carriers 1 to the fabric sliding sheet

– Loosen screw 3.
– Turn holder 2 in such a way that both carriers 1 have the same distance to the fabric sliding sheet.

Height of the carriers 1 as to the fabric sliding sheet

– Loosen counternut 5.
– Turn the piston rod in such a way that there is a distance of approx. 0.5 mm between the lowered carriers and the fabric sliding sheet.

Adapting the carriers 1 to the seam distance

The carriers are adapted to the seam distance by bending.

– Align the carriers cautiously by lateral bending.

Front adjustment of the carriers

The carriers are positioned correctly if there is a distance of approx. 2 mm between the rotary disc 6 of the scissors and the guide rail 7 in the front end position of rail 7.

– Push the guide rail 7 right to the front.
– Loosen screws 8.
– Adjust the guide rail in such a way that there is a distance of approx. 2 mm between the rotary disc 6 of the scissors and the guide rail 7.
– Tighten screws 8.

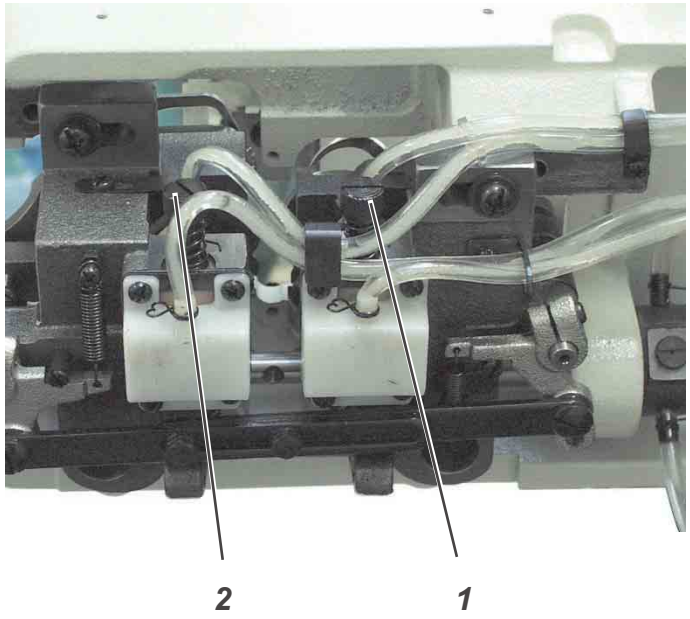
Carriers of the guide rail

The buffers 10 of the carriers have to be extended by the cylinders 9 so far that the guide rail is transported without slippage.

The distance between the buffers 10 of the carriers should be narrower than the thickness of the guide rail.

– Unscrew cylinder 9.
– Adjust the piston rods of the cylinders correspondingly.
– Screw cylinder 9 on again.

13. Hook lubrication



Standard

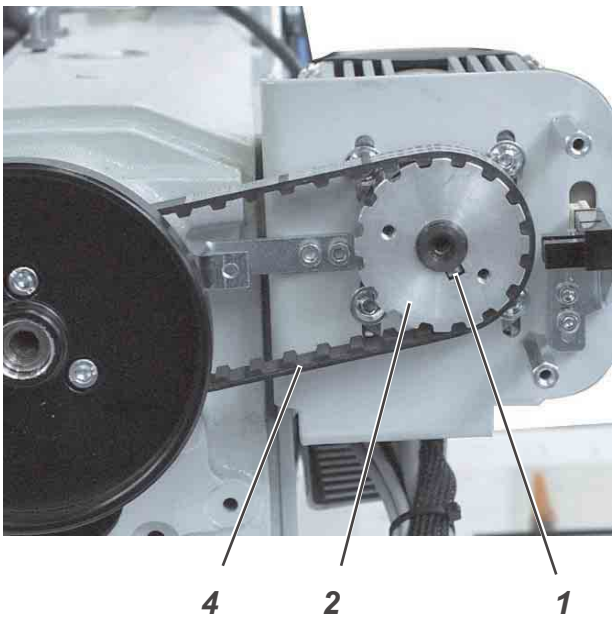
The necessary oil quantity has been adjusted by the manufacturer with the screws 1 and 2. It should be reduced or increased in special cases only.

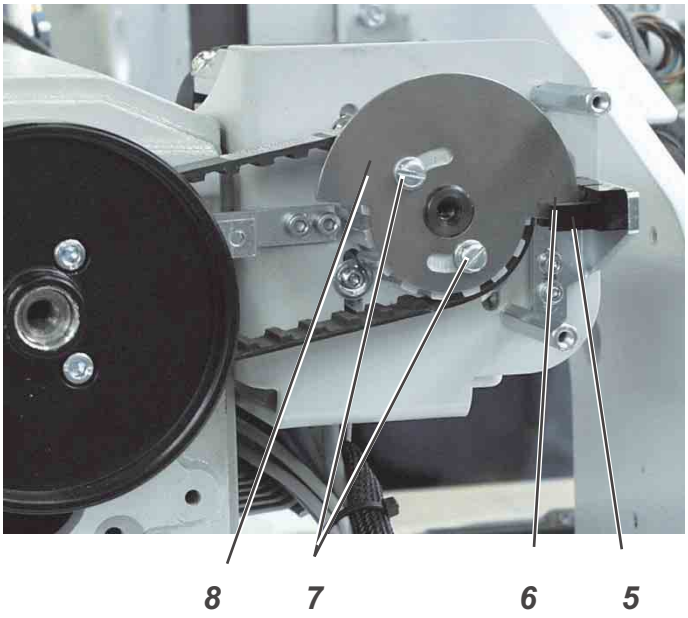
- Adjust the screws 1 and 2.
- Screw the screws in: less oil.
- Screw the screws out: more oil.

Attention !

Do not screw in the screws too deeply! The oil wick may be damaged.

14. Locator and tooth belt disc

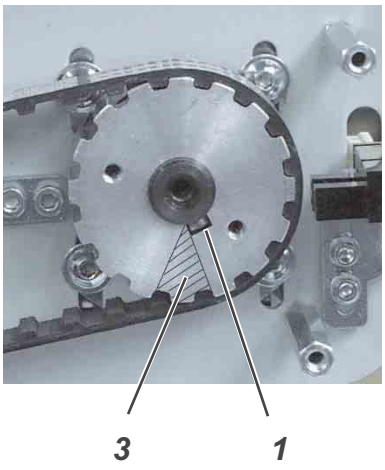




Caution: Risk of injury !

Switch the main switch off.

Adjust the locator only with the sewing unit switched off.



Standard

To guarantee a precise positioning the toothed disc 2 has to be positioned in such a way that the wedge 1 is ***not*** in the hatched area 3 when the machine is positioned.

After positioning the thread lever should be in the top dead centre.

Adjusting the toothed disc

– Reposition the toothed belt 4 correspondingly.

Adjusting the positioning disc

– Turn the sewing machine into the position “thread lever in top dead centre”.
– Loosen screws 7.
– Turn the cam segment 8 in such a way that the switch cam 6 stands exactly on the locator 5.
– Tighten screws 7.
– Check the positioning and correct, if necessary.

15. Maintenance

Caution: Risk of injury !

Switch the main switch off.
The maintenance of the sewing unit must only be carried out when the machine is switched off.

The daily or weekly maintenance work (cleaning and oiling) to be done by the operators of the sewing unit is described in Part 1: Operating Instructions. It is only listed in the following table for the sake of completeness.

Work to be done	**Operating hours**			
	8	40	160	500
Machine head				
Remove pieces of fluff, sewing dust and thread tails from the area around the hook and the throat plate	X			
Supply the oiling points with oil (see Operating Instructions chapter ..)		X		
Check the oil level in the oil reservoir		X		
Check the oil flow at the inspection glass	X			
Check the hook lubrication		X		
Clean the lenses of the bobbin thread monitor	X			
Clean the reflected foils	X			
Drive unit and transport carriage				
Check state and tension of the V-belts and toothed belts			X	
Pneumatic system				
Check the water level in the pressure regulator	X			
Clean the filter insert of the maintenance unit				X
Make leak test of the system				X
Optional equipment				
Clean the fresh air and exhaust air filters of the suction unit (blow out)			X	

Part 4: Programming instructions 100/68

Index Page:

1. General notes . . . 3

2. Operating terminal . . . 4
2.1 Operating the touch screen monitor . . . 4

3. User interface . . . 5
3.1 Menu structure of the sewing and setting programs . . . 5
3.2 Switching the seam functions on/ off . . . 7

4. Specified seam programs . . . 8

5. Main screen . . . 9

6. Menu level 1 . . . 12
6.1 Seam sequences . . . 12
6.2 Seam functions . . . 14
6.3 Copying seam programs . . . 15
6.4 Seam parameters . . . 16
6.5 Global parameters . . . 23
6.6 Service menu . . . 27
6.6.1 Multitest . . . 27
6.6.2 Machine test . . . 35
6.6.2.1 Testing the corner knife unit . . . 36
6.6.2.2 Testing the bobbin thread monitor . . . 41
6.6.2.3 Testing the centre knife . . . 42
6.6.2.4 Testing the ejector roller . . . 43
6.6.2.5 Testing the step motor for the transport clamp . . . 44
6.6.2.6 Testing feeding operation, material feed and sewing cycle . . . 45
6.6.2.7 Testing the sewing motor . . . 46
6.6.3 DAC Update . . . 48
6.6.4 Storing and loading program data with the USB stick . . . 50
6.6.4.1 Saving data on a USB stick . . . 50
6.6.4.2 Reading data from the USB stick . . . 52
6.6.5 Manufacturer . . . 53
6.6.6 Control panel settings . . . 53
6.6.6.1 Brightness and contrast . . . 53
6.6.6.2 Calibration . . . 54
6.6.6.3 Touch test . . . 55
5.6.6.4 Colour test . . . 55
6.6.8 Init parameters . . . 56
6.6.8.1 Configuration . . . 56

Index **Page:**

6.6.8.2 Init global parameters 57
6.6.8.3 Init all sewing parameters 57
6.6.8.4 Init sequences 57
6.6.9 Configurating the menu level 1 58
6.9.9.1 Language selection 59
6.7 Version 59

1. General notes

This manual contains important information on the safe and correct use of the control generation “**DACIII**”.

Screen images in this brief description

The symbol display on the various screens depends on the equipment and the settings of the sewing unit. The screen images illustrated in this instruction manual may therefore not always correspond exactly to the screens appearing in the display of the control unit.

Touch screen operating terminal

The user is guided by internationally comprehensible symbols and additional texts in the selected language. The various symbols are arranged in groups within the menu structure of the sewing and test programs.
The easy operation allows short training times.

Ease of programming

The user can combine 99 freely programmable seam programs with any number of seam patterns.
20 pocket sequences are available.
Each pocket sequence can be composed of max. 8 seam programs in any order.

For the “slanted pocket version” all practice-oriented slants can be programmed by the operator.
Neither time-consuming conversion of the corner knives nor inconvenient programming of offset seams is required.

Setting and test programs

A comprehensive test and monitoring system is integrated in the **DACIII**control.
A microcomputer does the control tasks, supervises the sewing process and indicates operating errors and malfunctions.

Errors and test results are indicated in the touch screen display.
When the machine is operating normally, the display shows information relating to operation and sewing.
In case of an operating error or a disturbance the function sequence is interrupted. The display indicates the cause by the corresponding error symbol.
In most cases the error symbol disappears as soon as the error cause has been eliminated.
In some cases the main switch has to be switched off for safety reasons during the error elimination.

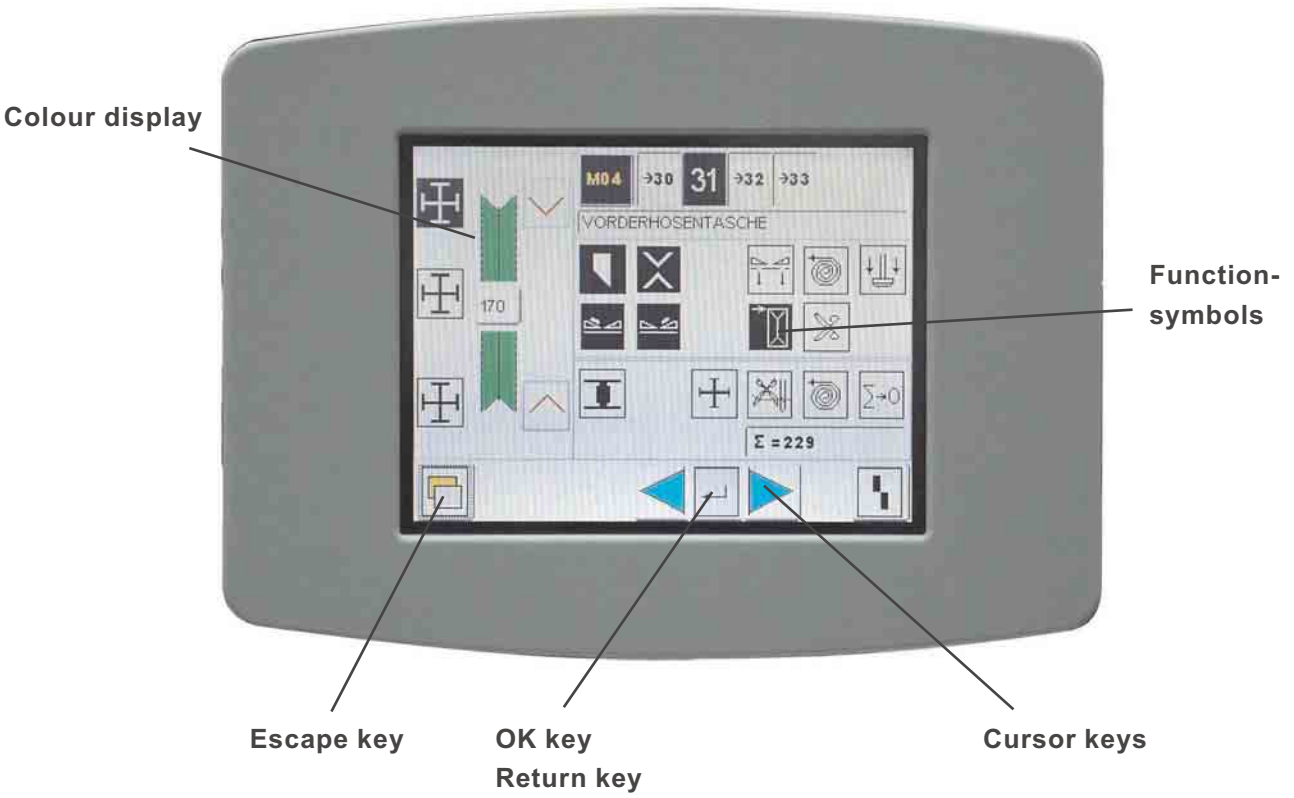
Special programs facilitate mechanical settings and allow input and output elements to be quickly tested without any additional measuring devices.

USB stick

The USB stick serves for the long-term storage of all programmed data as well as for the transfer of the software version and the operating language.
It allows data to be transferred to other sewing units.
The control transfers the data to the USB stick.
Stored data can be loaded from the USB stick into a DAC III control again.

2. Operating terminal

The data input and output is done via a touch screen.



Key/ Key group	Function
Cursor keys	Select function / parameter. ◁, ▷ : Select symbol of the desired function/ parameter △,▽ : Switch function / parameter on/off, select previous/ next step of the value, activate the test program
Escape key	Display the old value again.
OK key	Open window to set the selected function/ parameter. Take over the set value.
Function symbols	Direct selection of function/ parameter.

2.1 Operating the touch screen monitor

To start a function touch the screen with a fingertip where the corresponding symbol is displayed.

– Tap the desired function symbol with the tip of your finger.

3. User interface

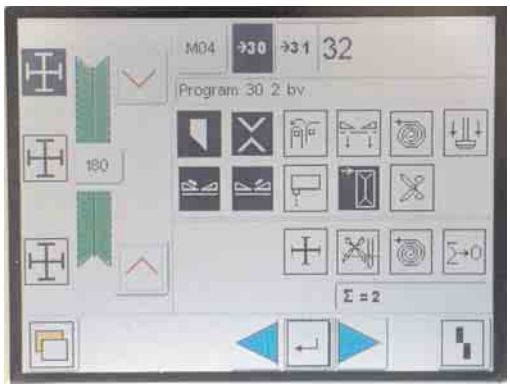
3.1 Menu structure of the sewing and setting programs

The user interface uses internationally comprehensible symbols.
In addition each function is briefly explained in an information line.
The individual parameters as well as the setting and test programs are arranged in various groups.

Switch the main switch on

Actuate the reset key

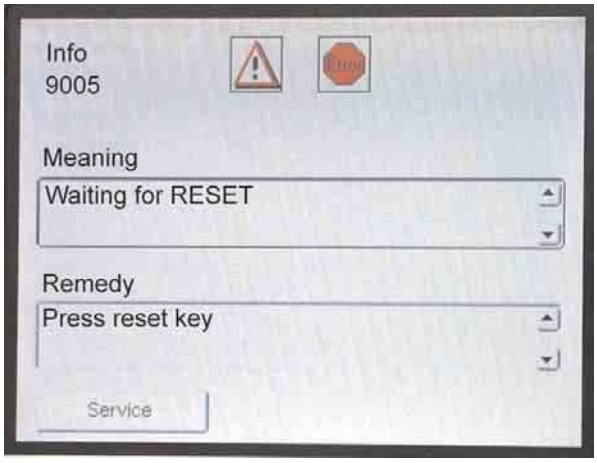
Main screen



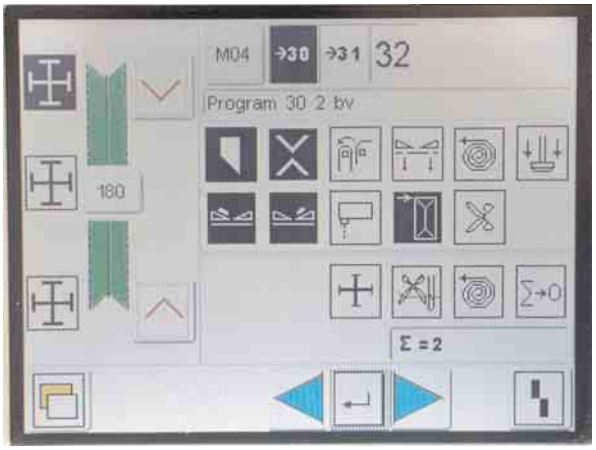
- Sewing programs
- Menu level 1
  - Seam sequence
  - Seam function
  - Copy seam programs
  - Seam parameters
  - Global parameters
  - Service
  - Version

4

– Switch the main switch on.
The control loads the machine program.
The start screen appears in the display of the touch screen monitor.



– Press the program stop switch at the control panel.
The display changes over to the main screen.



Calling up the menu levels

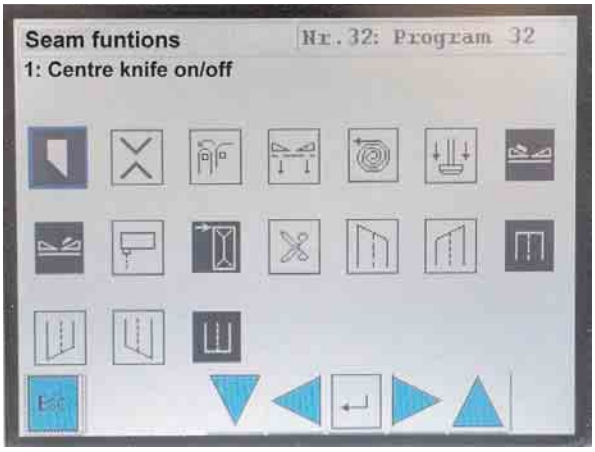
– Switch the main switch on.
The control loads the machine program.
The start screen appears in the display of the touch screen monitor.

– Press the program stop switch at the control panel.
The display changes over to the main screen.

– Press the symbol.
You get to the menu level 1.

3.2 Switching the seam functions on/ off

The parameter values are altered in the individual parameter screens.



– Tap the desired parameter.
  The symbol of the selected parameter is framed in blue.
– Tap the desired parameter once again.
  The function is switched on/off or a window with the prompt or the current values appears.

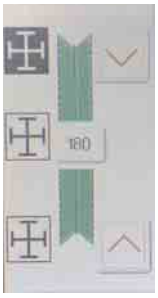
4. Specified seam programs

The following seam programs have been stored by the manufacturer:

Storage location		Kind of seam
M01	01	Flap pocket - men’s jacket, right part
	02	Flap pocket - men’s jacket, left part
	03	Piped pocket - men’s jacket, left part
	04	Piped pocket - men’s jacket, right part
M02	10	Slanted flap pocket - right part
	11	Slanted flap pocket - left part
	12	Slanted piped pocket - right part
	13	Slanted piped pocket - left part
M03	20	Men’s jacket inside pocket with fleece; pocket length 60 mm
	21	Men’s jacket inside pocket with fleece; pocket length 100 mm
	22	Men’s jacket inside pocket with fleece; pocket length 150 mm
	23	Men’s jacket inside pocket with fleece; pocket length 150 mm
M04	30	Hip pocket
	31	Front trousers pocket
	32	Hip pocket with flap
	33	Hip pocket with loop
M05	40	Pocket with zipper
	41	Hip pocket with zipper
M07	16	Men’s jacket: breast welt pocket

5. Main screen

On the main screen the seam pattern, the seam program, the selected pocket sequence as well as important seam functions are displayed. The seam functions can be individually selected by the user.



Seam pattern

The left half of the display shows the seam pattern of the selected seam program.

Storage location and seam program

The top right corner of the display shows the program number and the selected pocket sequence.

– Move the cursor to the desired seam program number.

– Press the OK key.
The seam program is activated.

– Press the OK key.
The seam program is deactivated.

NOTE !

If no seam program is active, an error message is produced.

Seam functions

The symbols in the middle of the right display half enable a quick access to important parameters.
The operator can combine up to 18 parameters to be displayed in the main screen (see also chapter __).

Example:

Centre knife switched on (on/ off)

Corner knives switched on (on/ off)

Stacker or ejector roller (on/ off)

Vacuum (automatic)

Tape feed (on/ off)

Holding stamp (on/ off)

Activate/ deactivate left flap clamp

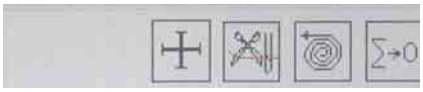
Activate/ deactive right flap clamp

Activate/ deactivate light barriers

Feeding position (on/ off)

Zipper scissors and zipper unwinder (on/ off)

The functions and adjustments of the individual seam functions are described more exactly in the chapters 5.4 (”Seam parameters”).



Further operating keys

Activate/ deactivate laser lamps

Threading key for needle thread (thread clamp)

Manual tape feed

Reset the daily piece counter

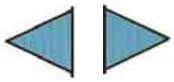
Information line

In the information line the selected seam program is explained by text and can be individually lettered by the user.

Piece counter (daily piece counter)

The current reading of the piece counter is displayed on the right under the parameter symbols.

The piece counter indicates the number of pieces produced after the last counter reset.



Cursor keys

Changing between the individual icons

OK key

Activating or deactivating of functions

Reset key

Resetting of functions

6. Menu level 1

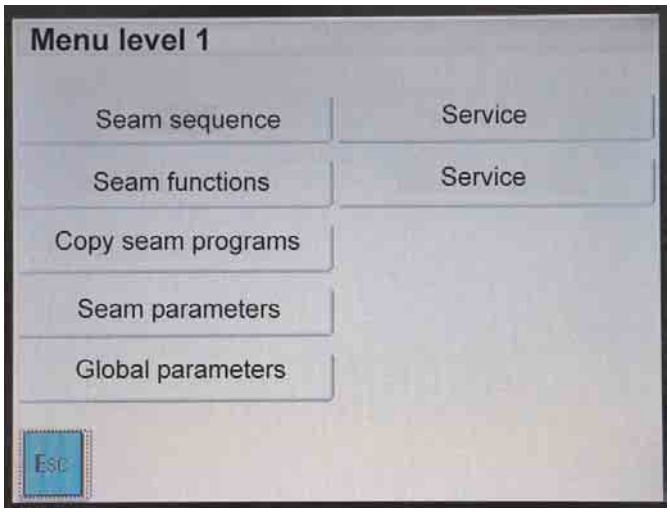
Via the menu level 1 the user can adapt the sewing unit to his special requirements, e.g. it is possible to generate new seam programs, to optimize existing seam programs and to alter parameter values.

6.1 Seam sequences

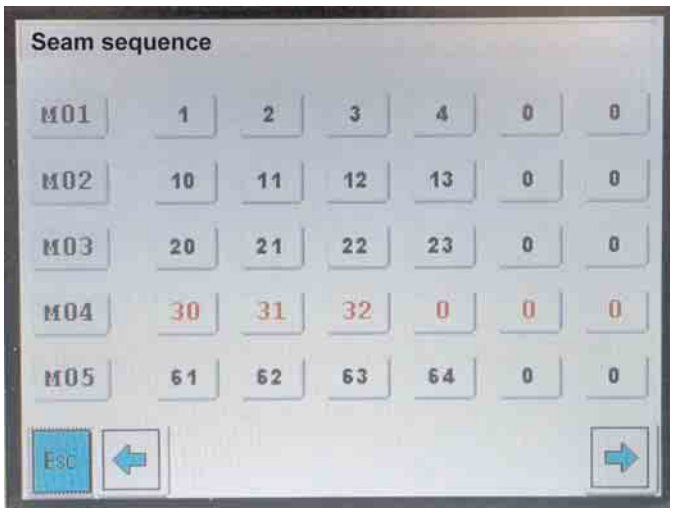
Under this menu item it is possible to allocate seam programs to the individual storage locations.

A total of 20 independent storage locations is available.
Up to 6 seam programs can be combined on every storage location in any desired order.

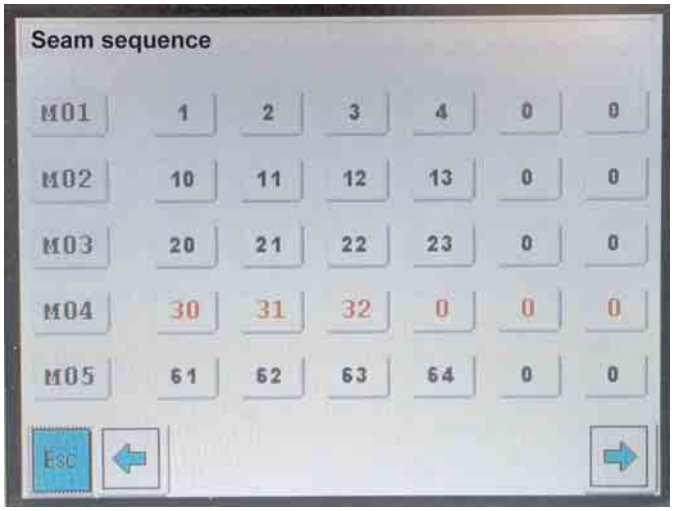
– Press the symbol on the main screen.
  The display changes over to the screen “menu level 1".



– Tap the symbol “seam sequence”.
  The screen “seam sequence” appears.

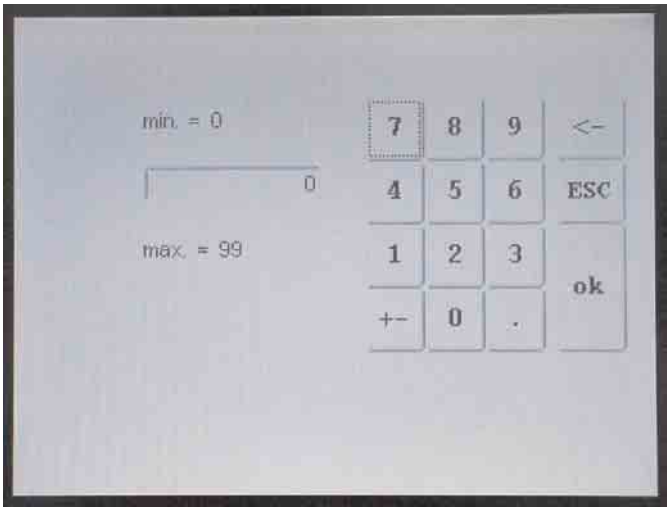


Programming seam sequences



– Tap the desired storage location.
Example: M04
The selected pocket sequences are displayed in red.
0 = seam program location is empty

– Tap the first storage location.
Example: Tap a “0” for the seam program.
The following screen appears:

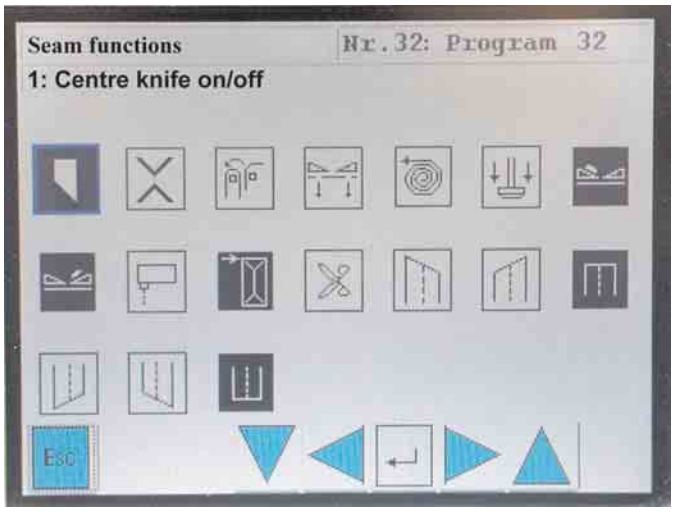


– Enter the number (01 ...99) of the desired seam program.
Example: 33
0 = no seam program

– Tap the “**OK**”key.
The display returns to the main screen.

4

6.2 Seam functions



Via this menu the seam functions to be switched on or off for the current seam program on the main screen can be activated according to the equipment.

– Select the icon with the cursor keys.
The icon is framed in blue.

– Tap the “**Return**” key.
The function is activated.
The icon is displayed with a black background.

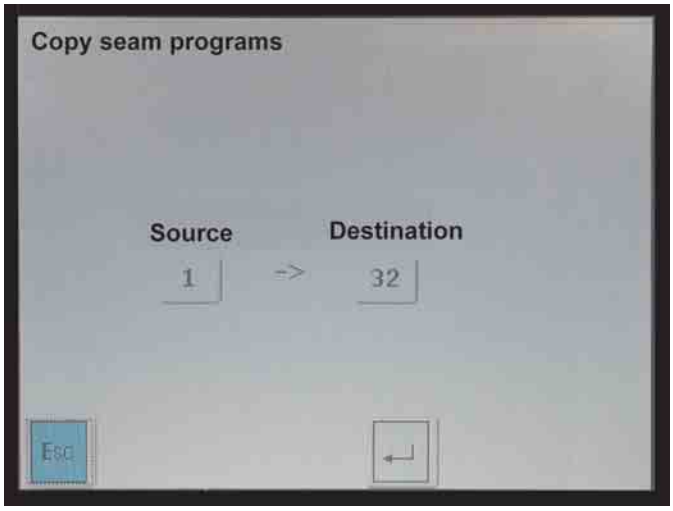
or

– Tap the seam function key directly.
The function is activated.
The icon is displayed with a black background.

NOTE !

It is advisable to activate only those functions with which the machine is equipped.

6.3 Copying seam programs



Via this menu new seam programs can be generated or existing ones can be overprinted.

The following steps are required:

1) Select a new seam program location (Example: Program No. 32).
2) Copy an existing program (Example: 1) to the new program location.
3) Adapt the seam parameters or seam functions of the new program to your requirements.

Copying the seam program

ATTENTION!

Existing program settings are overwritten.

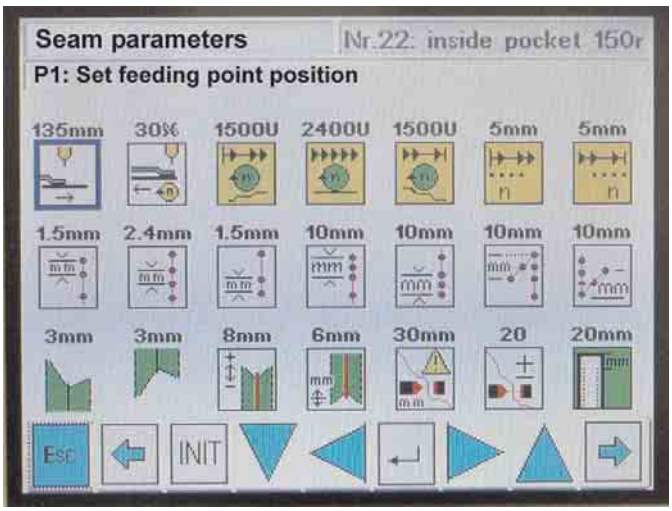
- Tap “copy seam programs”.
- Select new seam program location (Example: Program No. 32).
- Tap “source”. The numeric pad appears.
- Tap the number of the source program.
- Tap “destination”. The numeric pad appears.
- Tap the number of the new program location.
- Tap the “OK” key. The data of program 1 are copied to the program location 32.

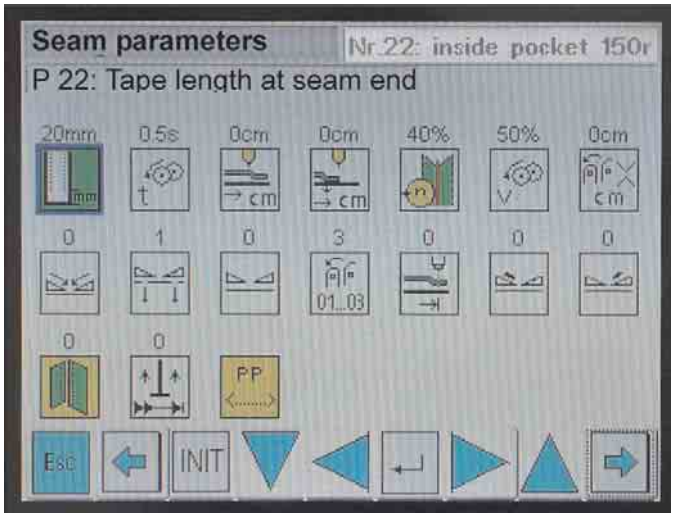
6.4 Seam parameters

Under this menu item the parameters for programming the various seam programs are called up.

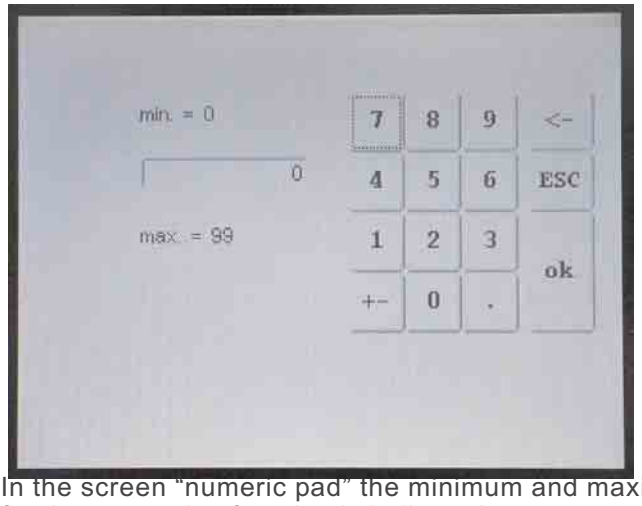
With the help of the parameters the seam course and the corresponding additional functions are programmed.

– Press the symbol on the main screen.
  The display changes over to the screen “menu level 1".
– Tap the symbol “seam parameters”.
  The screen “seam parameters” appears.



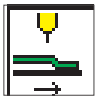


– The selected pocket program is indicated in the upper part of the display (e.g. “**No. 32:** ”).
  If available, the pertaining program name is displayed (e.g. “**<Program 32>**”).
– Tap the desired parameter or select it with the cursor keys.
  The symbol of the selected parameter is blue-shadowed.



In the screen “numeric pad” the minimum and maximum value valid for the respective function is indicated.

– With the key “<-” an input can be deleted.
– Alter the selected parameter as described in chapter 4.2.
– By tapping the function key “**OK**” the display returns to the screen “menu level 1" and the altered value is taken over.



1 Front feeding point

Via this parameter the feeding point is set.

The set value determines the reference point of the seam.

Input: 135, 225, 315 mm
Factory setting:

2 Feeding speed

Via this parameter the clamping speed from the feeding position to the sewing start position is set.

As soon as the photocell is active, the speed is reduced by half to enable a precise scanning. When processing fleece material the speed is reduced to a third.

Input: 10 - 90 %
Factory setting: 35 %

3 Speed at the seam beginning

Via this parameter the speed of the machine head is set.
It it dependent on the needle and centre knife switching.

Input: 500 - 2000 rpm
Factory setting: 1500 rpm

4 Speed within the seam

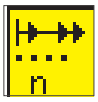
Via this parameter the speed within the seam is set.

Input: 500 - 3000 rpm
Factory setting: 2500 rpm

5 Speed at the seam end

via this parameter the speed at the seam end is set.

Input: 500 - 2000 rpm
Factory setting: 1500 rpm



6 Seam section speed at the seam beginning

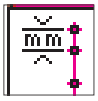
Via this parameter the seam section at the seam beginning to be sewn with the “speed of the seam beginning” is set.

Input: 0 - 99 mm
Factory setting: 5 mm

7 Seam section speed at the seam end

Via this parameter the seam section at the seam end to be sewn with the “speed of the seam end” is set.

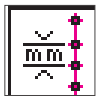
Input: 0 - 99 mm
Factory setting: 5 mm



8 Stitch length seam beginning

via this parameter the stitch length for bartacks or stitch condensing at the seam begining is set.

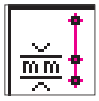
Input: 0.5 - 3 mm
Factory setting: 1.5 mm



9 Stitch length main seam

Via this parameter the stitch length within the seam is set.

Input: 0.5 - 3.5 mm
Factory setting: 2.4 mm



10 Stitch length seam end

Via this parameter the stitch length at the seam end is set.
It affects bartacks and condensed stitches at the seam end.

Input: 0.5 - 3.0 mm
Factory setting: 1.5 mm

11 Seam section stitch length at the seam beginning

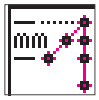
Seam section with stitch length of parameter “stitch length at the seam beginning”

Input: 0.5 - 99 mm
Factory setting: 10 mm

12 Seam section stitch length at the seam end

Seam section with stitch length of parameter “stitch length at the seam end”

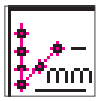
Input: 0.5 - 99 mm
Factory setting: 10 mm



13 Bartack length at the seam beginning

Via this parameter the bartack length at the seam beginning is set. If this value is set to 0, it is automatically sewn with condensed stitches.

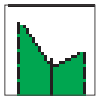
Input: 0 - 20 mm
Factory setting: 10 mm



14 Bartack length at the seam end

Via this parameter the bartack length at the seam end is set. If this value is set to 0, it is automatically sewn with condensed stitches.

Input: 0 - 20 mm
Factory setting: 10 mm



15 Slant at the seam beginning

Via this parameter the slant at the seam beginning is set.

Offset seam (difference left/right needle) át the seam beginning.

Input: 0 - 10 mm
Factory setting: 3 mm

16 Slant at the seam end

Via this parameter the slant at the seam end is set.

Offset seam (difference left/right needle) at the seam end.

Input: 0 - 10 mm
Factory setting: 3 mm

17 Engaging the centre knife

According to the seam and knife width the centre knife should make an approx. 1 mm longer cut than the corner knife at the seam beginning.

Input: 0 - 30 mm
Factory setting: 8 mm

18 Disengaging the centre knife

According to the seam and knife width the centre knife should make an approx. 1 mm longer cut than the corner knife at the seam end.

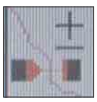
Input: 0 - 30 mm
Factory setting: 6 mm

19 Thread monitor on after

Seam section after which the thread monitor is activated;
alter the parameter for sewing lengths < 30 mm.

Input: 0 - 99 mm
Factory setting: 30 mm

Set the value to 10 for pocket lengths under 40 mm.



20 Thread monitor filter

The smaller the number, the more sensitive the needle thread monitor will react.

Input: 0 - 99
99 = Thread monitor deactivated
Factory setting: 20

21 Fleece length at the seam beginning

Via this parameter the fleece projection at the seam beginning is set.

Input: 0 - 99 mm
Factory setting: 20 mm

22 Fleece length at the seam end

Via this parameter the fleece projection at the seam end is set.

Input: 0 - 99 mm
Factory setting: 20 mm

23 Duration of ejector roller rotation

Via this parameter the precise positioning of the workpiece for the subsequent stacking operation is set.

Input: 0 - 99 sec
Factory setting: 0.5 sec

In case of blower the time for “blowing” is set.

24 Selection and position of intermediate stop.

Via this parameter the position to which the main clamp is to be moved after stacking is set.

Input 01 cm : The main clamp is moved to the feeding station

Input: 0 - 48 cm.
Factory setting: 0 cm

25 Feeding the workpiece (selection and position)

If an input is made, the main clamp becomes pressureless after corner incision automatically and the workpiece is pushed to the set position.

Input 01 cm: The workpiece is moved to the feeding station

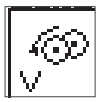
Input: 0 - 48 cm.
Factory setting: 0 cm

26 Centre knife speed

Via this parameter the cutting speed of the centre knife is set.

Input: 10 - 99%
Factory setting: 40%

27 Ejector roller speed



By reducing the speed you will achieve a more precise positioning when stacking.

Input: 0 - 99 %
Factory setting: 50 %

28 Stacker position

Via this parameter the stacking position is set.

Input 00: Stacking at the position of corner incision

Input: 01 - 99 cm
Factory setting: 0

01 -99 The main clamp moves to another position after the corner incision.

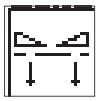
01 The function is switched on and the main clamp moves to a fixed position of 380 mm from the feeding position.

02-99 The higher the value, the farther the main clamp will move to the back.

29 Folding slide mode

Via this parameter the folding slide is set.

Input: 00: Left and right folding slide active
01: Left folding slide active
02: Right folding slide active
03: Left and right folding slide inactive



30 Vacuum mode (option)

In conjunction with icon under the menu “seam functions”

Via this parameter the activation of the vacumm is set.

Input: 00: Vacuum on automatically, main clamp to the feeding position
01: Vacuum on by foot switch forwards

31 Main clamp mode

Via this parameter the activation of the main clamp is set.

Input 00: Left/right main clamp down with pressure
01: Left main clamp down with pressure
02: Right main clamp down with pressure
03: Both main clamps not fixed

32 Stacker mode

Input 02: Stacker
03: Stacker and ejector

When equipped with blower:

Input: 01

Reverse lock active – inactive

Input: 00: Back push barrier active
01: Back push barrier inactive

34 Flap clamp mode, left

Input 00: Flap clamp active with foot switch only
01: Flap clamp active automatically

35 Flap clamp mode, right

Input: 00: Flap clamp active with foot switch only
01: Flap clamp active automatically

36 Breast welt mode

The following working methods are possible:

Input: 01: Folder down after flap clamp closed
02: Folder down after left main clamp closed

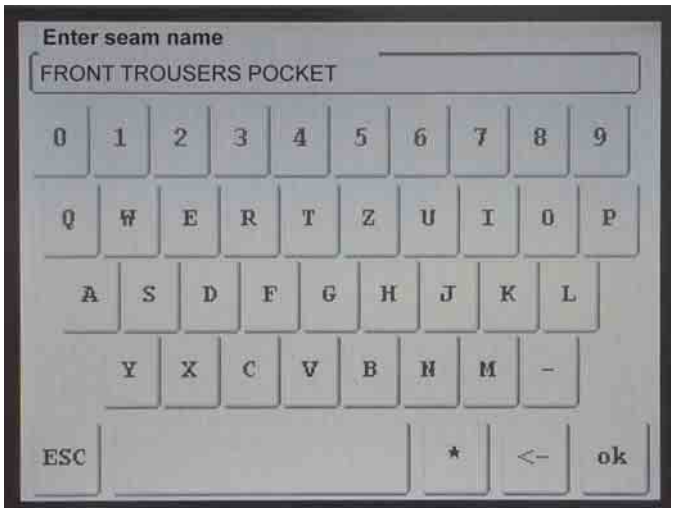
37 Folder up at the seam end

For quicker feeding it is possible to move the folder to the initial position directly after the seam end.

Input: 00: off
01: on

Entering the name of the seam program

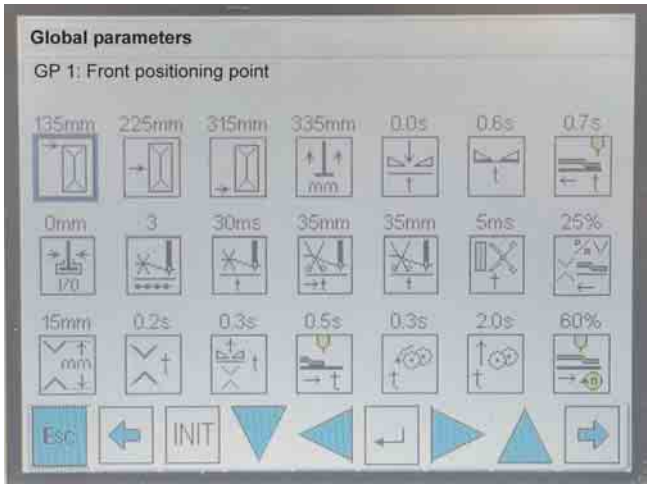
The following screen appears:

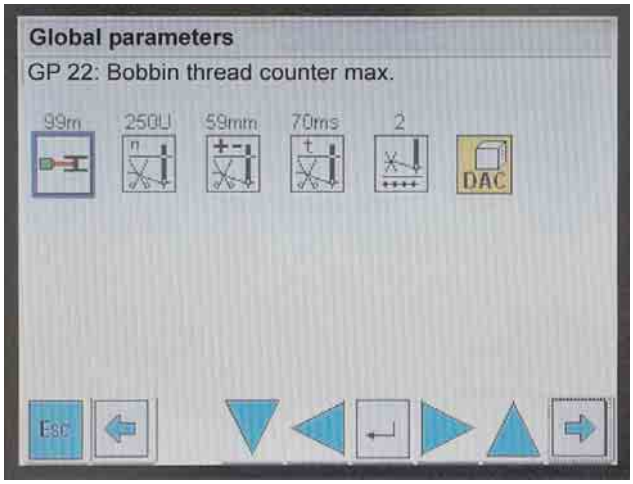


– Enter the seam name.
– Tap the icon “**OK**”.

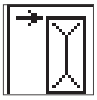
6.5 Global parameters

The global paramaters comprise the general machine settings.
Alterations will affect all programmed seams.





The following global parameters can be altered:

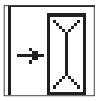


01 Front feeding point

Distance between feeding position and sewing start.
When the seam length is changed, only the seam end will vary.

Input: min = 100, max = 300

Factory setting: 135 mm

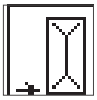


02 Central feeding point

With this setting the seam beginning is calculated in such a way that seam beginning and seam end are equally shifted when the seam length is changed.
This is usually required for a hip pocket with dart in case the dart is to be located in the middle of the pocket.

Input: min = 100, max = 400

Factory setting: 225 mm



03 Rear feeding point

Setting: Distance between feeding position and seam end.
When the seam length is changed, the seam end remains unchanged and the seam beginning varies.

Input: min = 200, max = 450

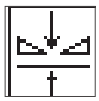
Factory setting: 315 mm

04 Folder up after

The time when the folder is swivelled up after sewing.
If the section is set too short, the folder will get caught at the folding slides.

Input: min = 100, max = 500

Factory setting: 335 mm



05 Clamp automatically down

When a time is set, the main clamp will close after reaching the feeding position plus the set time only.

Input: min = 0,0, max = 1,0

Factory setting: 0,0

06 Time after clamp down

Time delay between the function “clamp down” and the next operation.

Input: min = 0,0, max = 1,0

Factory setting: 0,3

07 Time before feeding

When the set time is over, the main clamp moves from the feeding position to the sewing start (When the foot switch is pressed forwards)

Input: min = 0,0, max = 1,0

Factory setting: 0,2

08 Piping blowing on/off

The piping or the flap are blown against the folder to avoid “slipping” of the piping.
When moving towards the needles, the blowing is automatically effected at the seam beginning.

Input: 00: off
01: on

09 “Thread clamp open” at the seam beginning

After the first two stitches the needle threads should be released by the thread clamp.
The thread clamp opens after the number of stitches set here.

Input: min = 0,0, max = 20

Factory setting: 2

10 “Thread clamp open” - Duration

Duration of “opening the thread clamp” at the seam beginning.
The thread catcher must extend so far that the threads are released.

Input: min = 0, max = 99

Factory setting: 20 ms

11 Until the needle thread is trimmed at the seam end

Time for catching and trimming the needle thread.

Input: min = 0, max = 100

Factory setting: 30

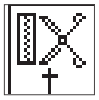
12 Duration of needle thread trimming

Duration of impulse for thread catcher

The cylinder must extend completely.

Input: min = 0, max = 50

Factory setting: 28



13 Cutting duration of zipper scissors

Influences the zipper scissors in such a way that it cuts the zipper completely before moving to the end positiont.

Input: min = 0,0, max = 0,5

Factory setting: 0,5 s

14 Moving to the cutting position

Percentage of the speed of the main clamp when moving to the corner knives.

Input: min = 10, max = 99

Factory setting: 25%

15 Distance of corner knives

Distance between the corner knives

Adjustment of the front and rear corner knives in the reference position.

Input: standard corner knives 50 mm

bias corner knives 56 mm

Factory setting according to equipment

16 Corner knife cutting

Cutting duration of the corner knives.

Input: min = 0,0, max = 1,0

Factory setting: 0,3 s

17 Main clamp open

Opening of the main clamp after corner trimming.
If a too short time is set, the workpiece may slide out of the machine before being taken over by the stacker.

Input: min = 0.0, max = 1.0

Factory setting according to equipment

18 Taking over of workpieces

When returning the workpieces by a non-fixed clamp (processing of inside pockets) the main clamp opens after corner trimming and the ejector roller transports the workpiece out of the clamp sideways.

Afterwards the clamp is switched via this parameter so that the workpiece is quickly scanned and transported to the feeding position by the main clamp.

Input: min = 0,0, max = 1,0

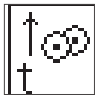
Factory setting: 0,5 s

19 Until the rotation of the ejector roller

Time for the start of the ejector roller rotation.

Input: min = 0,0, max = 1,0

Factory setting: 0,1 s



20 Until ejector roller up

Holding the workpiece after ejecting until the stacker has taken it over safely.

Input: min = 0,0, max = 3,0

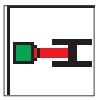
Factory setting: 0,5 s

21 Clamp speed

Speed of the main clamp when moving to the feeding position.

Input:

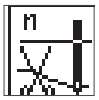
Factory setting: 90%



22 Bobbin thread counter on/off or thread length full bobbin

This function can be switched on and off.

Input 00: Bobbin thread monitoring on.
With this setting the bobbin thread counter is deactivated automatically.
01-99: Thread length full bobbin



23 Thread trimmer speed

Positioning speed for thread trimming systems.
Input: 250 rpm

24 Thread trimmer position

Correction of the start of the thread trimmer impulse.
The smaller the set number, the earlier the bobbin thread trimmer will start.

Input: 01 - 59

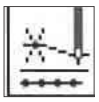
Factory setting: 45

25 Thread trimming duration

The duration of the bobbin thread trimming should be as short as possible, because otherwise the main clamp will be moving already.

Input:

Factory setting: 0.1 sec



26 Thread tension

Number of stitches until the needle thread tensions close after the sewing start.

Input:

Factory setting:

Setting the machine parameters

Go to the technician level via the code number.
(for Beisler service personnel only)

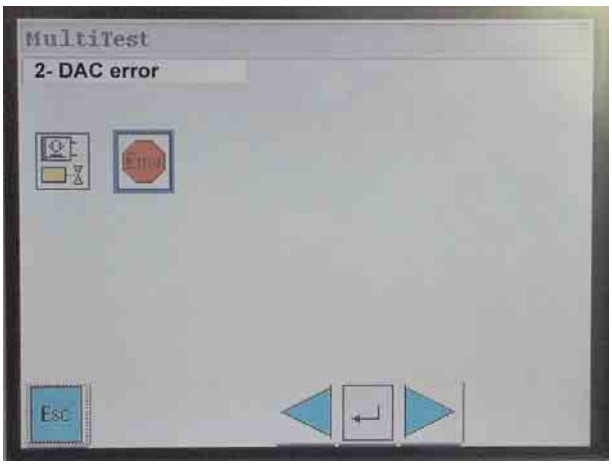
6.6 Service menu

The machine software includes various machine-specific setting and test programs.

– Select language.

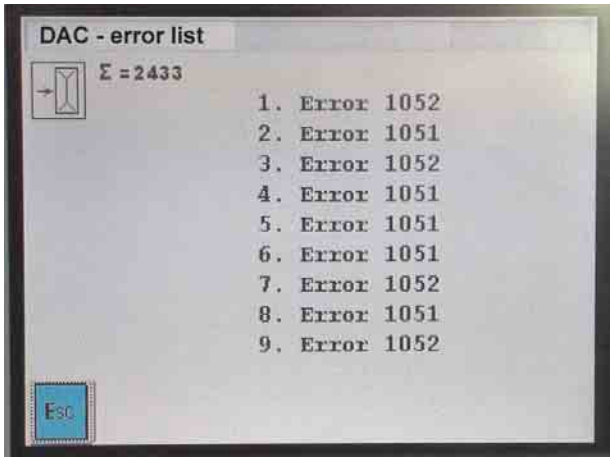
6.6.1 Multitest

The test programs of this menu allow the quick test of input and output elements of the sewing unit.



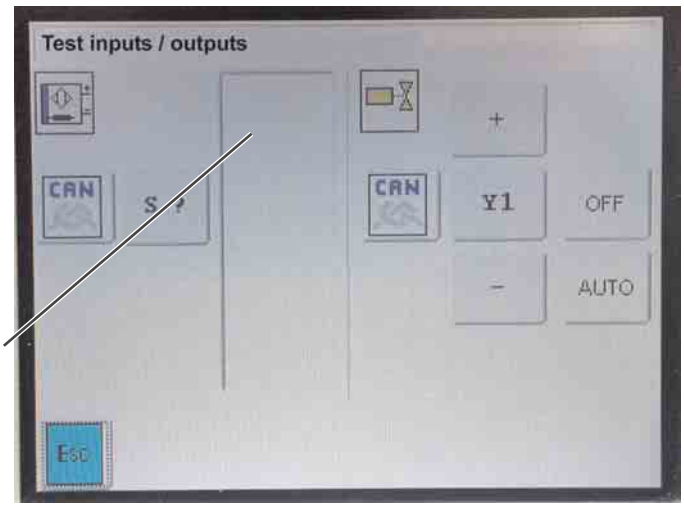
– Tap the inputs and outputs.
The program serves for testing the input and output elements.

..... – Select error list.
The DAC error memory appears.



Display “Total piece counter”
Counter reading cannot be deleted.

Testing inputs/ outputs



Inputs Outputs

ATTENTION !

The input elements have been carefully set by the manufacturer. Settings and corrections must only be done by trained service personnel.

Caution: Risk of injury !

Do not reach into the running machine during the function test.

4

Testing input elements

CAN .....

– Change between the basic module (inputs S1 to S104) and the CAN node (inputs SC101 to SC116) with the key “CAN”.

S ? .....

– Tap the key “S?”.
The “numeric pad” is opened.

– Enter the code number of the desired input element (see tables).

– Tap the key “OK”.

– Actuate the input element and check the switching state at the display.
In the field 1 the designation and the switching state (+/-) of the actuated input is displayed.

ESC .....

– Tap the function key “**ESC**” to quit the menu.

NOTE !

It is also possible to test several inputs one after the other.

Input elements machine head unit (X120b)

Input element	Designation
S1	OFW1 left
S2	OFW2 right
S3	DATAOUT (MM DC-module)
S4	DATAOUT (ejector roller DC-module)
S5	Main clamp feeding position
S6	Feeding station safety switch
S7	Folder down

Input elements machine head unit (X120t)

Input element	Designation
S9	Corner knife unit swivelled in
S10	Reverse lock (LS)
S12	Zipper feed
S14	Pedal start
S15	Pedal reset
S16	Pedal vacuum

Input elements machine head unit (X140b)

Input element	Designation
S100	Ref. sewing motor
S101	Ref. feeding unit (X)
S102	Ref. knife support seam beginning (Y)

Input elements machine head unit (X100b)

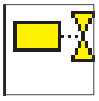
Input element	Designation
S17 Interrupt	LS flap scanning 1
S20 Interrupt	LS flap scanning 2

Input elements machine head unit (X100t)

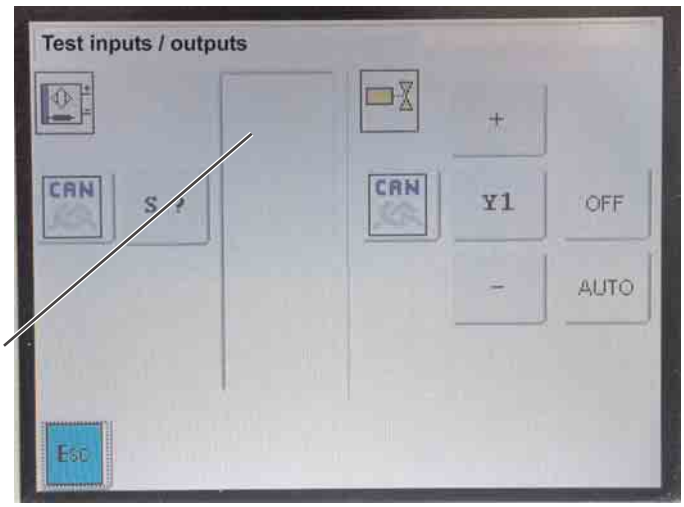
Input element	Designation
S21 Interrupt	Tape control (Tape feed)
S24 Interrupt	Program stop switch

Input elements CAN-module plug 1

Input element	Designation
	– Tape the key “CAN”.
SC101	Folder up (in case of zipper only)
SC102	Stamp up
SC103	Clamp adjustment, left
SC104	Scissors up (in case of zipper only)
SC105	Scissors down (in case of zipper only)
SC106	Clamp adjustment, right
SC107	Corner knife down seam end
SC108	Corner knife down seam beginning
SC109	Corner knife down seam end (left)
SC110	Corner knife down seam beginning (left)



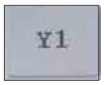
Testing output elements



– Change between the basic module and the CAN node with the icon “CAN”.
Y1 or Y101 is displayed.

– Select the desired output with the icon “+” / “-”.

or



– Tap on icon “Y1” or “Y101”.

– Enter the code number of the desired output element (see tables).

– Tap the key “OK”.
The output element is switched on.
The display 1 shows a “+”.

– Tap the key “OFF”.
The input element is switched off.
The display 1 shows a “-”.

– Actuate the key “Auto”.
The output element is red-shadowed and actuated in interval mode.

Output elements machine head unit (DAC3-X120b)

Valve	Designation
Y1	Needle thread catcher
Y2	Centre knife impulse
Y3	Centre knife tappet
Y5	Bobbin thread trimmer
Y6	Thread lifting
Y7	Needle disengagement, left
Y8	Needle disengagement, right

Output elements (DAC3-X120t)

Valve	Designation
Y9	Folder down
Y10	Folder up
Y11	Corner knife up
Y12	Corner knife up, small pocket
Y13	Corner knife, left - movable
Y14	Corner knife, right - movable
Y15	Corner knife, left - stationary
Y16	Corner knife, right - stationary

Output elements (DAC3-X140t)

Valve	Designation
Y101	Zipper motor

Output elements CAN node plug 1

Valve	Designation
YC101	Flap clamp, right
YC102	Folding slide, left
YC103	Folding slide, right
YC104	Flap clamp, left
YC105	Main clamp open
YC106	Main clamp, left
YC107	Main clamp, right
YC108	Blowing “photocell for remaining bobbin thread”

Option:

YC109	Quick clamp adjustment, left	
YC110	Stamp and switch SC102	
YC111	Y10	Vacuum
YC112	Y13	Flap-type stacker start
YC113	Y23	Ejector roller
YC114	Y51	Fleece lifting
YC115	Y09	Fleece cutting
YC116	Y50	Quick clamp adjustment, right

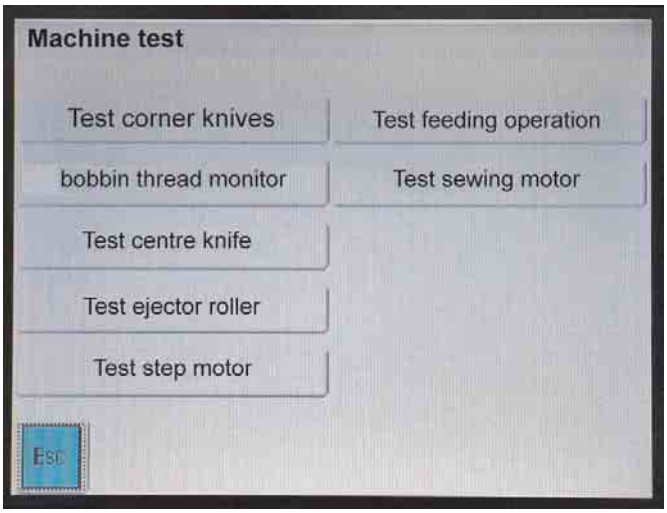
Output elements CAN node plug 3

Valve	Designation
YC133	Zipper carrier
YC134	Scissors swivelling (in case of zipper only)
YC135	Scissors cutting (in case of zipper only)ors cutting
YC136	Blowing of piping
YC141	Laser lamp
to	
YC148	Laser lamp

Output elements CAN node plug 4

Valve	Designation
YC149	Laser lamp (extension)
to	
YC156	Laser lamp (extension)

6.6.2 Machine test

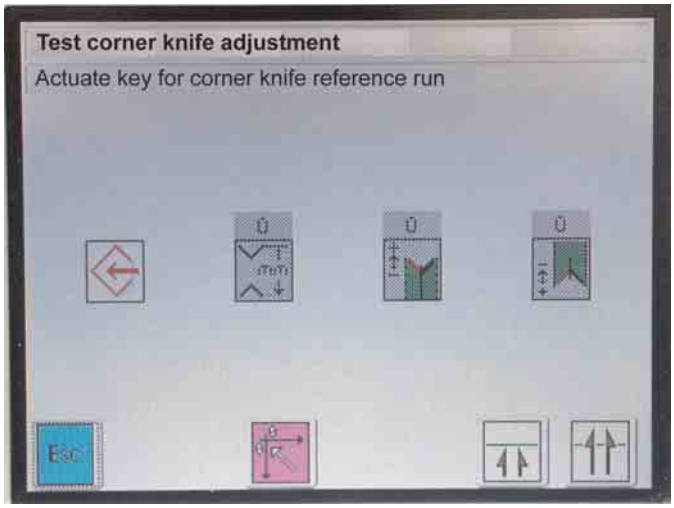


The machine test serves for adjusting and testing of individual sewing unit components.

ESC ..... – Tap the function key **ESC** to quit the menu “machine test”.

6.6.2.1 Testing the corner knife unit

With this program the step motors and cylinders can be checked.

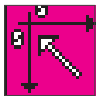


Machine parameters corner knives

Corner knife distance is displayed or checked.
After opening the menu the step motors for the corner knives can be tested.

Test correction of corner knives at the seam beginning (in case of slanted pockets only)

Test correction of corner knives at the seam end (in case of slanted pockets only)



Reference run corner knife supports

Check corner knives (cylinder)

– Make reference run.

– Tap the desired parameter.
The program is started.

ESC

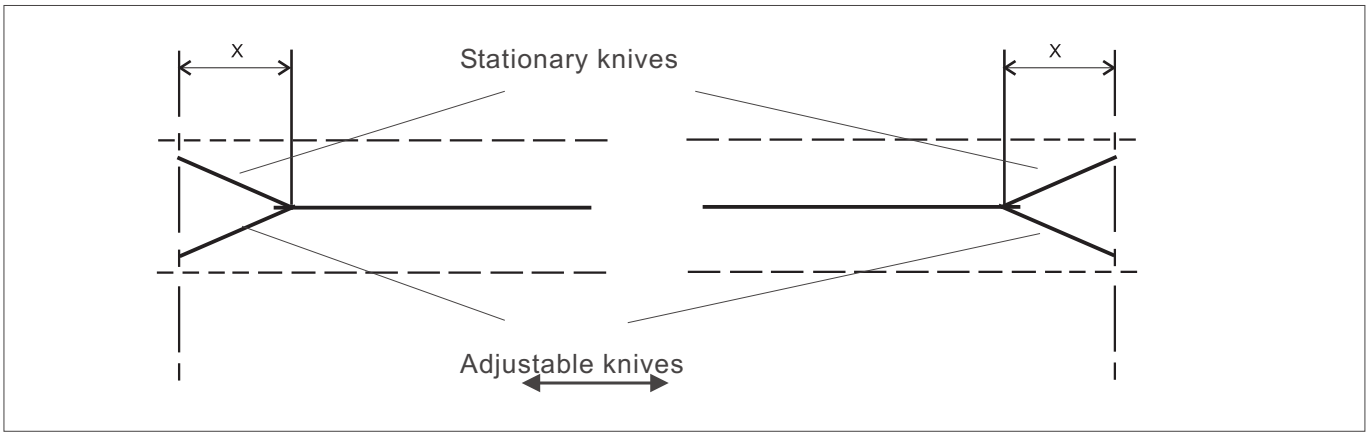
– Tap the function key “**ESC**” to quit the menu.

Machine parameters corner knives (basic adjustment)

In the program “machine parameters” the basic adjustment of the step motors for the corner knives as to the seam is made.

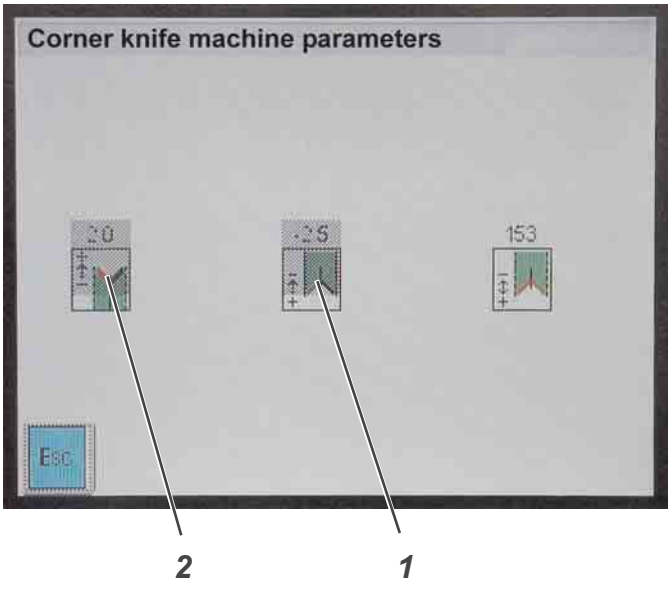
Prior to the correction of the corner incisions a workpiece should be prepared and sewn.
For this purpose proceed as follows:

- Set the maximum sewing length at the control.
- Iron a piece of fleece on a workpiece.
  Thus the corner incisions are better visible.
- Make a test seam.
- Check the seam pattern.



NOTE !

As regards sewing units for straight pockets the icons 1 and 2 are grey-shadowed and cannot be selected.



Correction of left corner knife seam beginning zero point or position of movable knife to stationary knife Messer

Slanted seam only.
Input: approx. 2.0

Note:

The two movable corner knives must be in parallel position.

Correction of left corner knife seam end zero point or position of movable knife to stationary knife

Slanted seam only.
Input: approx. 2.5

Correction value distance between needles and corner knives at the seam end

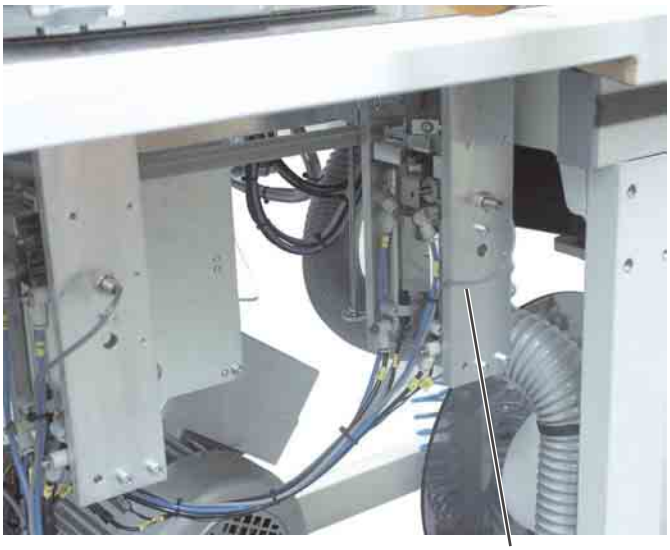
Input: approx. 153

Note:

The entered value applies to all seam programs.
If the value “seam end” is changed, the value “seam beginning” changes automatically.

Corner knife distance (test program)

With this program the corner knife distance can be checked or it can be tested whether the step motors move to the correct position.



1 *3* *2*

Caution: Risk of injury!

Do not reach into the area of the corner knives.
Carry out tests on the running machine with utmost caution.

– Tap the function key.
The step motors of the corner knife station make a reference run.
– Swivel the corner knife station 1 out.
– Tap the symbol “corner knife distance”.

– Enter a corner knife distance.
– Tap the key “**OK**”.
The corner knives move to the set value.

– Check the distance between corner knives 2 and 3.

Correction of corner knives at the seam beginning (only in case of slanted pockets)

– Tap the symbol “**correction of corner knives at the seam beginning**”.
– Enter a correction value (+ or -).

– Tap the key“**OK**”.
The front corner knives move to the set value.
– Check the distance between corner knives 2 and 3.

Correction of corner knives at the seam end

– Tap the symbol “**Correction of corner knives at the seam end**”.
– Enter a correction value (+ or -).

– Tap the key “**OK**”.
The hind corner knives move to the set value.
– Check the distance between corner knives 2 and 3.

The entered values are automatically reset when returning to the main screen.

Testing the corner knife motion

Caution: Risk of injury!

Do not reach into the area of the corner knives.
The corner knives shooting up can cause severe cuts.
Check the corner knives with utmost caution when the sewing unit is running.

The corner knives are tested in a sequence.

- Step 1 = front corner knives move upwards and remain in top position
- Step 2 = hind corner knives move upwards and remain in top position
- Step 3 = only the left front corner knife moves upwards and remains in top position
- Step 4 = right front corner knife moves upwards and remains in top position
- Step 5 = left hind corner knife moves upwards and remains in top position
- Step 6 = right hind corner knife moves upwards and remains in top position
- Step 7 = complete cutting operation with all four knives

– Tap the symbol.
The test sequence starts.

– Tap the Symbol once again.
The next step is carried out.

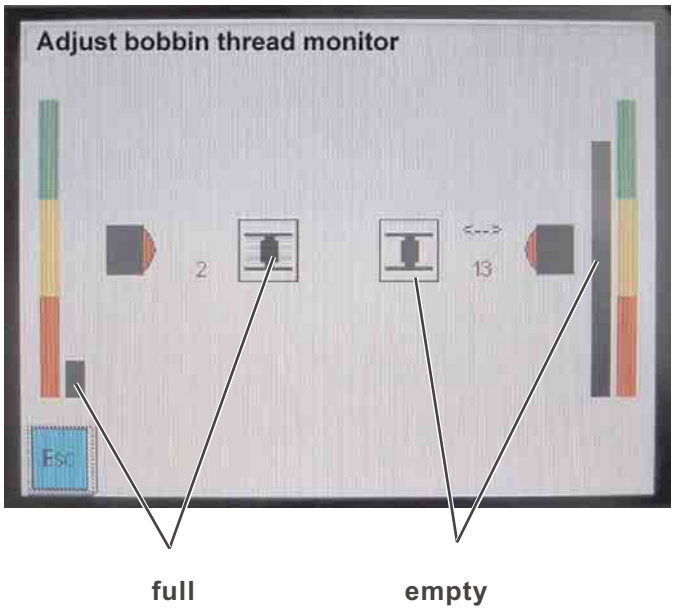
– Press the symbol until all steps have been carried out.

– Press the symbol to return to the previous step.

– Tap the function key **ESC** to quit the test program.

6.6.2.2 Testing the bobbin thread monitor

This program serves for testing the reflected light barriers of the bobbin threads.



Test with full bobbin

- Insert a full bobbin.
- Cover the bobbin thread monitor against extraneous light.
- Pull the bobbin thread.
- A value between **“0 – 4”** should be indicated in the bar graph.

Test with empty bobbin

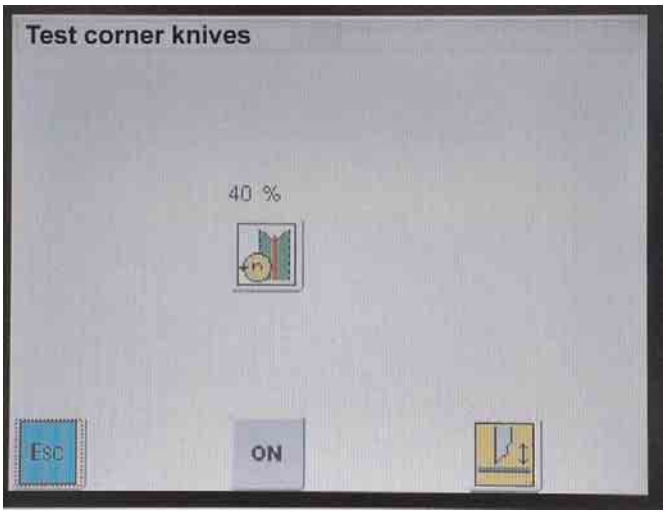
- Insert an empty bobbin.
- Cover the bobbin thread monitor against extraneous light.
- Turn the empty bobbin until the surface is in parallel position to the bobbin thread monitor.
- A value between **9 – 15**” should be indicated in the bar graph.

ESC

- Tap the function key **ESC** to quit the test program.

6.6.2.3 Testing the centre knife

With this program the centre knife drive can be tested.



..... – Tap the icon “**centre knife test**”.
The numeric pad appears.

– Enter the desired speed in % via the numeric keypad (standard = 40 %).

..... – Tap the icon “**OK**”.

..... – Tap the icon “**ON**”.
The motor runs at the entered speed.

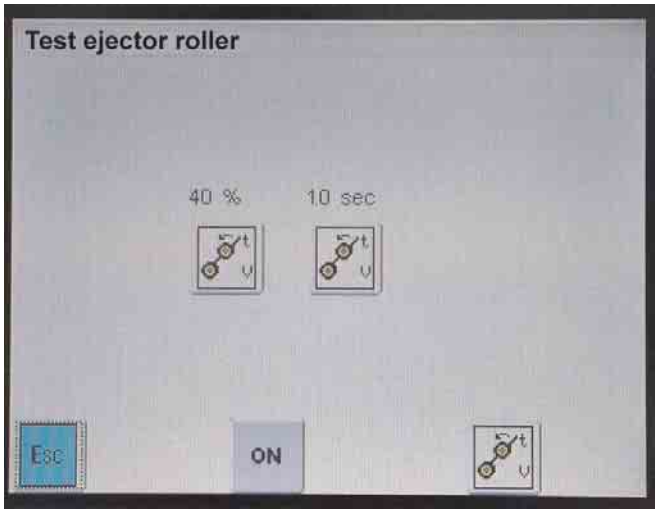
..... – Tap the icon “**knife**”.
The cylinder presses the knife into the cutting position.

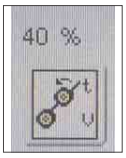
..... – Tap the icon “**OFF**”.
The motor stops.

..... – Tap the function key **ESC** to quit the test program.

6.6.2.4 Testing the ejector roller

With this program the function of the ejector roller is tested.

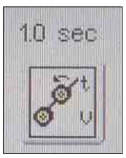




– Tap the icon “**ejector roller speed**”.
The numeric pad appears.

– Enter the desired speed via the numeric keypad.

– Tap the icon “**OK**”.



– Tap the icon “**ejector roller time**”.
The numeric pad appears.
– Enter the desired time via the numeric keypad.

– Tap the icon “**OK**”.

– Tap the icon “**ON**”.
The motor of the ejector roller runs.

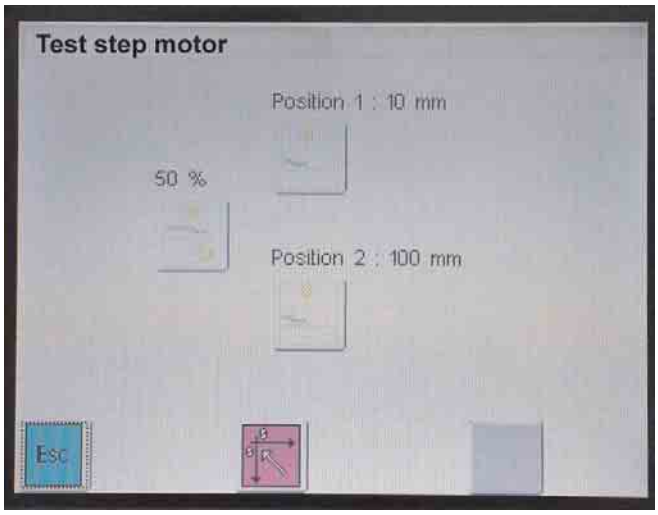
– Tap the icon “**OFF**”.
The motor of the ejector roller stops.

– Tap the icon.
The ejector roller lowers, rotates for the time set and returns to its initial position.

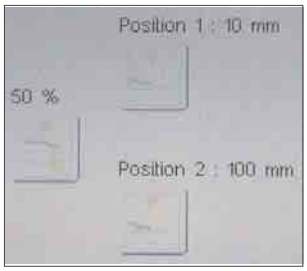
– Tap the function key **ESC** to quit the test program.

6.6.2.5 Testing the step motor for the transport clamp

With this program the step motor function is tested.



– Tap the icon “**reference run**”.
The main clamp moves to the reference position.



– Enter the desired speed and position.

caution: Risk of injury!
The clamp moves to the front and to the rear at top speed.

– Tap the key “**ON**”.
The test program is started.
The transport clamp moves back and forth within the set position.
Check whether the transport clamp always moves to the same positions.
(with the help of the marking at the clamp slide).

– Tap the key “**OFF**”.
The test program is stopped.

– Tap the function key **ESC** to quit the test program.

6.6.2.6 Testing feeding operation, material feed and sewing cycle

With this program the feeding operation is tested.

Two different test modes are available:

Test mode 1	The whole feeding operation and sewing cycle is carried out.
Test mode 2	Only the feeding operation and the clamp feed are started and stopped with the foot switch.

.....

– Tap the icon.

– Enter the mode.

.....

– Tap the icon “**ON**”.
The test program is started.

.....

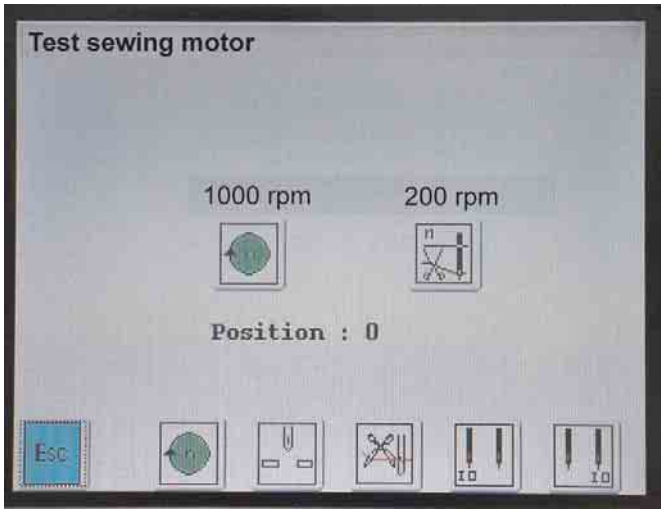
– Tap the icon “**ESC**” until the main screen appears.

– Start the feeding test with the central pedal.
The test can be repeated as often as required.

– Switch the main switch of the sewing unit off and on again.
The test mode is deleted.

6.6.2.7 Testing the sewing motor

With this program the sewing motor is tested.



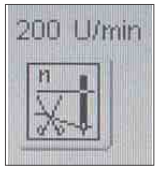
ATTENTION !
Pull the threads out of the needles and the thread lever.

..... – Tap the icon.

– Enter the desired speed.

..... – Tap the icon.
The sewing motor runs at the set speed.

..... – Tap the icon.
The sewing motor stops in reference position and the value is indicated in the display “position”.
Example : 355



..... – Tap the icon.

– Enter the desired speed for thread trimming.

..... – Tap the icon.
The sewing motor runs.

..... – Tap the icon.
Afterwards the sewing motor stops automatically and the thread trimmer is actuated.

– Tap the icon.
The sewing motor runs.

– Tap the icon.
The left needle is switched off or on respectively.

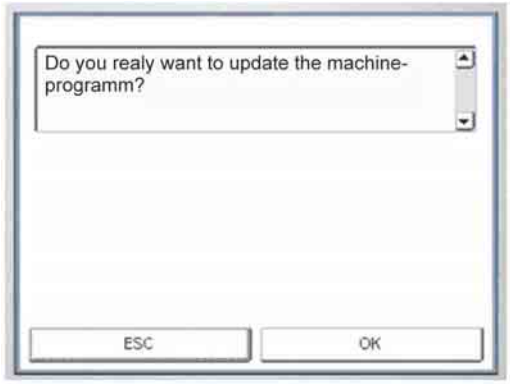
– Tap the icon.
The right needle is switched off or on respectively.

– Tap the icon.
The sewing motor stops in reference position and the value is indicated in the display “position”.
Example : 355

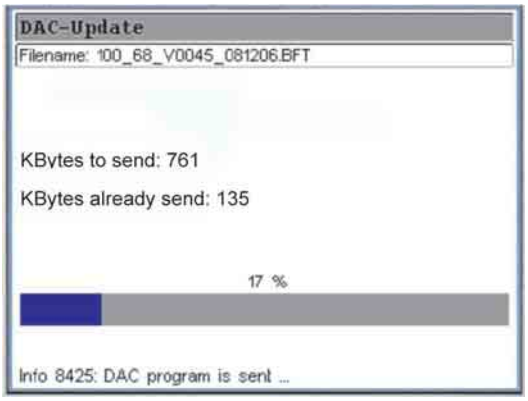
6.6.3 DAC Update

ATTENTION!
During the data transfer to the control the sewing unit must not be switched off.

- Switch the sewing unit off.
- Plug the USB stick in the plug-in position at the side of the control box.
- Switch the sewing unit on.
- Change to the menu DAC-Update.



- Tap the “**OK**” key.
  The following screen appears:



– Wait until the programs for operation and control are stored in the control panel.
Do not remove the USB stick from the control panel as long as the light emitting diode flashes.
After the transfer the following screen appears.

The sewing unit verifies the new program.
When finished the following screen appears.

OK ..... – Tap the “**OK**” icon.
The update is finished.

6.6.4 Storing and loading program data with the USB stick

A customary USB stick is used for the long-term storage of sewing programs and the transfer of the sewing unit software.

By means of the USB stick sewing programs, seam patterns and machine parameters can be transferred to other sewing units.

6.6.4.1 Saving data on a USB stick

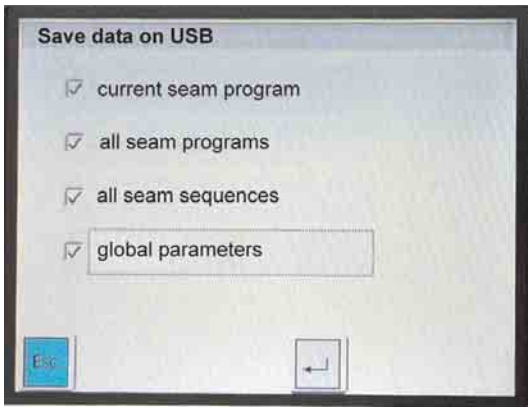
Global parameters and machine parameters, program sequences of current seam programs as well as seam programs can individually be transferred to the USB stick.

ATTENTION!

During the data transfer to the control the sewing unit must not be switched off.

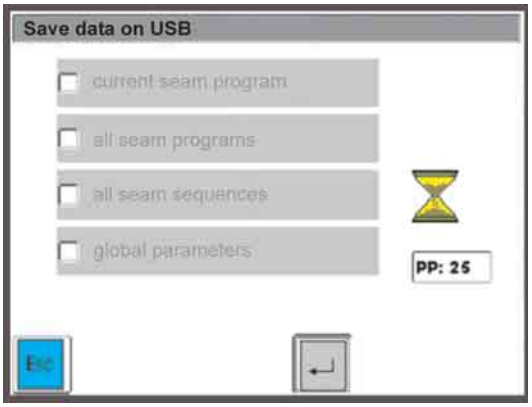
When transferring programs from one sewing unit to another only transfer the program sequences and seam programs.

– Plug the USB stick in the plug-in position at the side of the touch screen casing when the main screen is displayed.
– Call up the menu page “Save data on USB”.

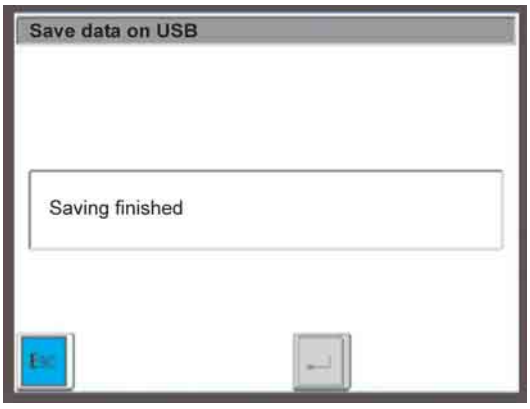


– Tap the data to be saved on the USB stick.
A checkmark appears in the checkboxes.

– Tap the “**OK** key.
The saving process starts.
A light-emitting diode flashes at the USB stick.



When the saving process is finished, the following screen appears:



– Unplug the USB stick.

– Press the ESC key until the main screen is displayed.

6.6.4.2 Reading data from the USB stick

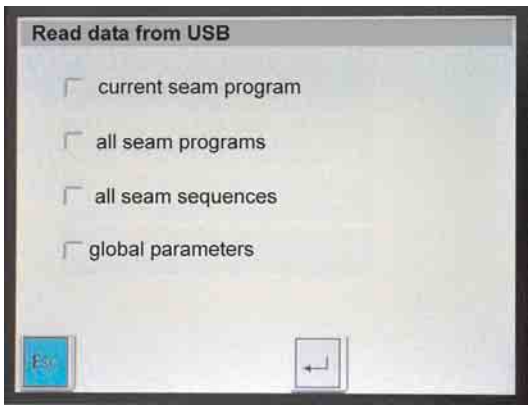
Machine parameters, program sequences and seam programs can individually be read from the USB stick.

ATTENTION!

During the data transfer to the control the sewing unit must not be switched off.

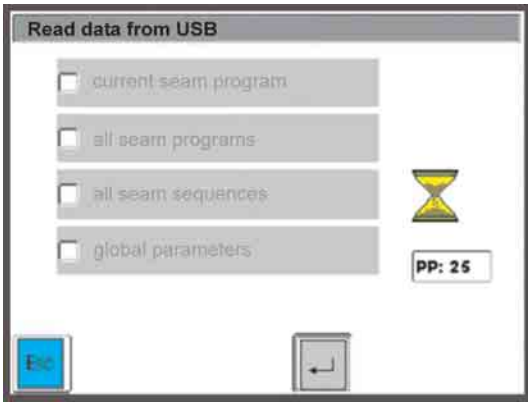
When transferring programs from one sewing unit to another only transfer the program sequences and seam programs.

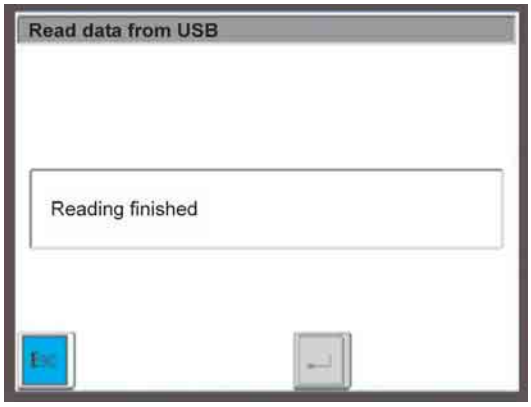
– Plug the USB stick in the plug-in position at the side of the control unit when the main screen is displayed.
The following screen appears:



– Tap the data to be saved by the USB stick.
A checkmark appears in the checkboxes.

– Tap the “**OK** key.
The loading process starts.
A light-emitting diode flashes at the USB stick.





When the saving process is finished, the right screen appears.

– Unplug the USB stick.

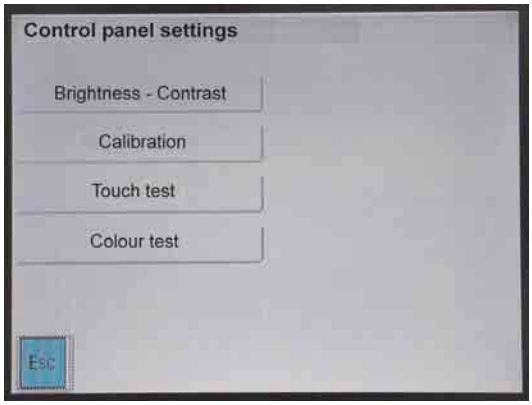
– Press the ESC key until the main screen is displayed.

6.6.5 Manufacturer

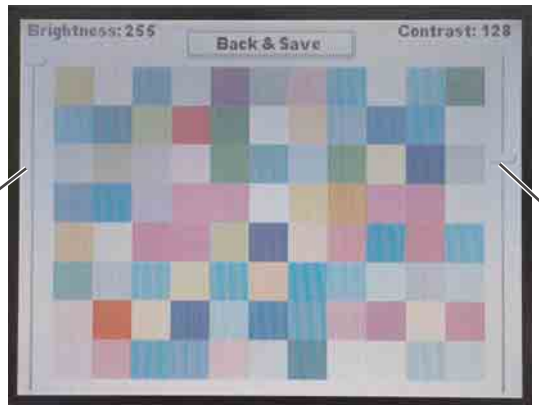
This menu is only accessible to Beisler service personnel. It is blocked by a security code.

6.6.6 Control panel settings

Via this menu the display of the control panel is set.



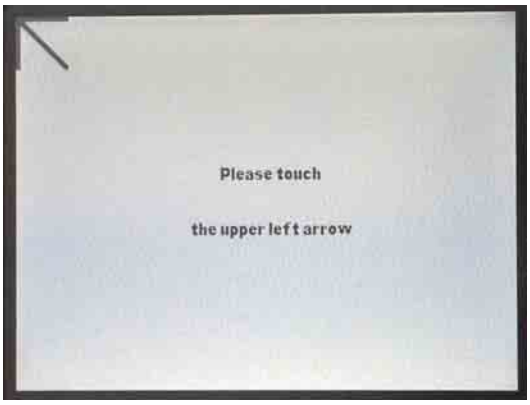
6.6.6.1 Brightness and contrast

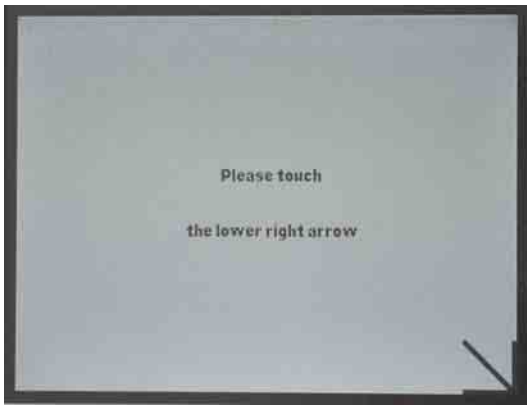


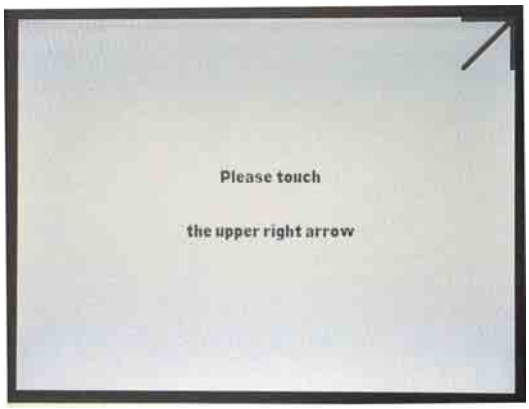
- Adjust the brightness with the slide control 1.
- Adjust the contrast with the slide control 2.
- Tap the key “Back & Save”.
  The settings are saved.

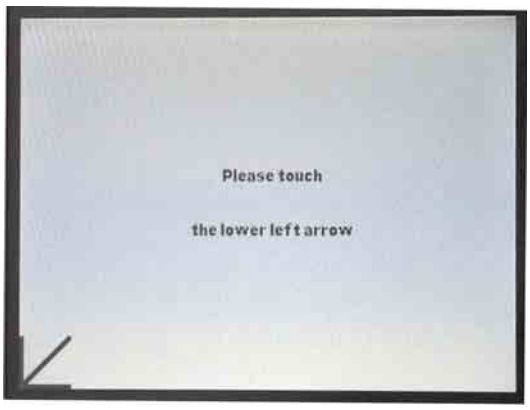
6.6.6.2 Calibration

Via this menu the display is calibrated.

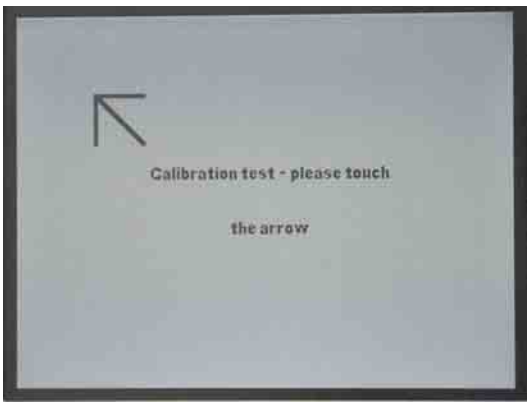


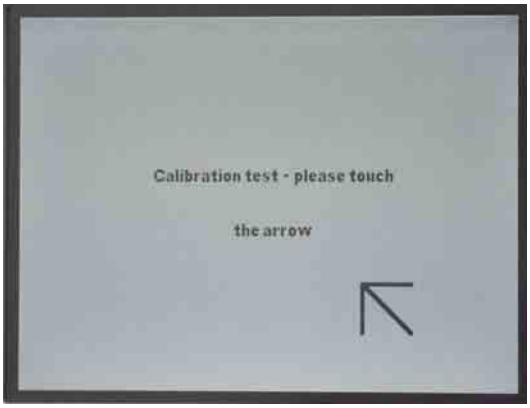






– Follow the instructions on the screen and tap the arrows in all four corners of the screen.

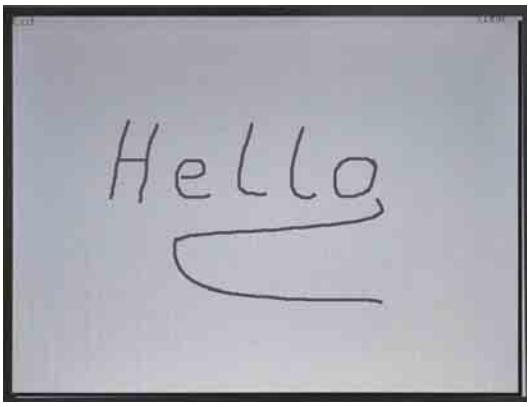




– Touch the upper arrowhead on the screen.
– Touch the lower arrowhead on the screen.
The calibration is finished.

6.6.6.3 Touch test

Via this menu the touch screen is tested.

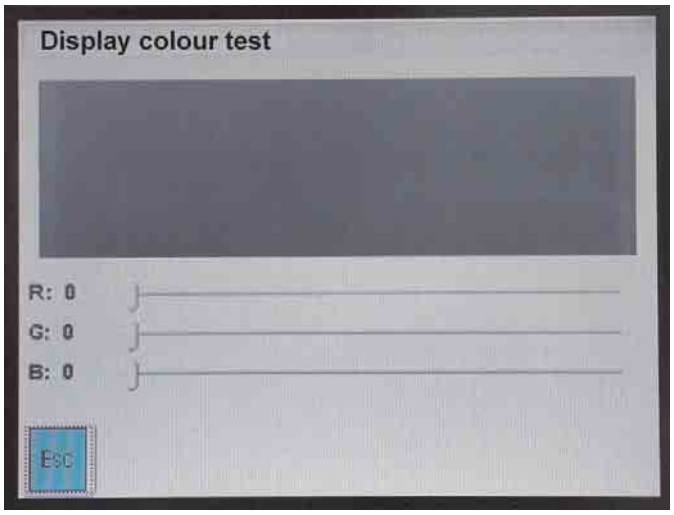


– Write something on the screen with a soft pen.

If the writing does not appear on the spot where the pen had been put, the screen has to be calibrated anew (see previous chapter).

5.6.6.4 Colour test

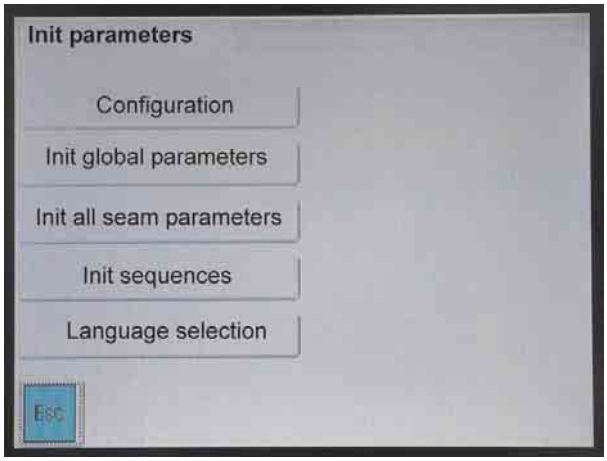
Via this menu the display is calibrated.



– Adjust the colours red, yellow and blue with the slide controls.

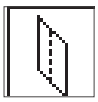
6.6.8 Init parameters

Via this menu it is possible to configurate the sewing unit and to generate new seam programs.

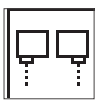


6.6.8.1 Configuration

According to the equipment of the sewing unit the individual icons are active or inactive respectively.



Slanted pocket
ON/ OFF



Light barriers for left/ right flap sider
ON/ OFF

Short pocket (optional)
ON/ OFF

Blower available
ON/ OFF

6.6.8.2 Init global parameters

ATTENTION !

Via this menu item all global parameters are reset to the factory setting.

6.6.8.3 Init all sewing parameters

ATTENTION !

Via this menu item all seam parameters are reset to the factory setting.

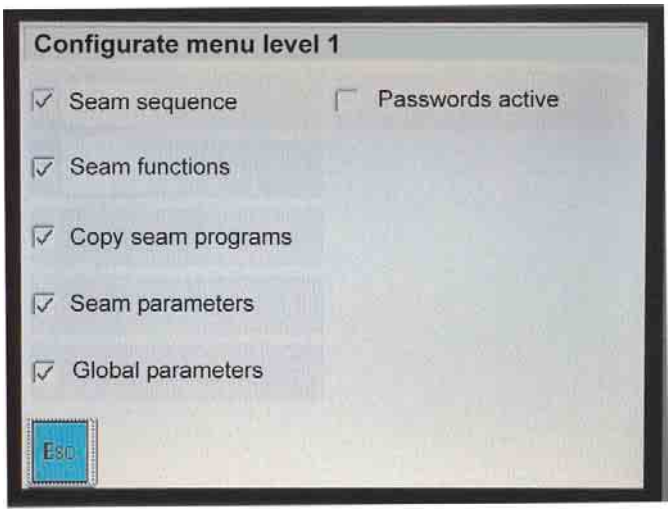
6.6.8.4 Init sequences

ATTENTION !

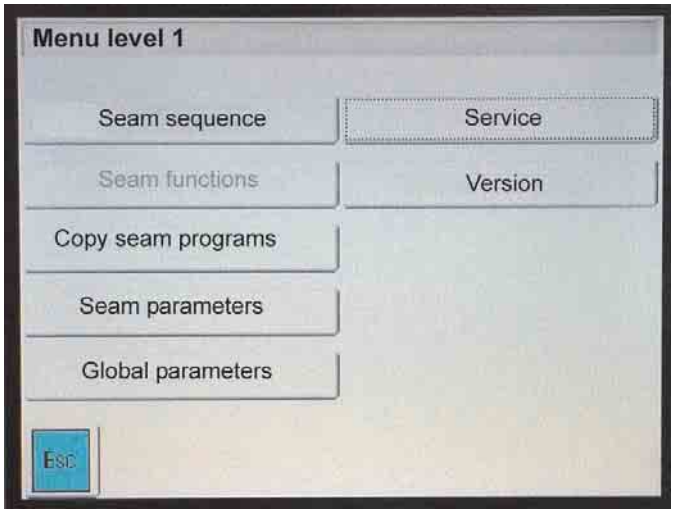
Via this menu item all seam sequences are reset to the factory setting.

6.6.9 Configurating the menu level 1

Via this menu item it is possible to block menu levels for the user. The activation of the menu levels can be secured by a password.

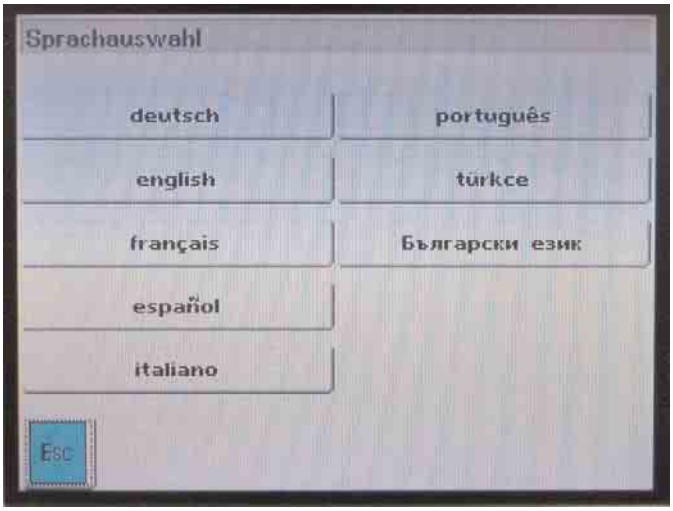


– Activate or deactivate menu items.
  If a menu item is deactivated, it is grey-shadowed in the menu level 1 and cannot be selected any more.
  Example: Seam functions deactivated.



– Tap the function “Password active”.
  The menu is secured by a password query.
  Password = 25438

6.9.9.1 Language selection

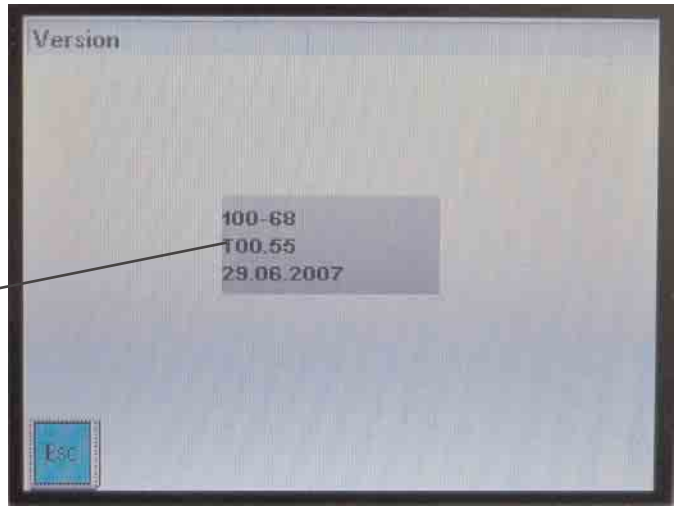


In this menu the language can be selected.

– Tap the language.
– Follow the instructions on the screen.

6.7 Version

This menu item provides information about the current software version.



Software version
(sewing unit)

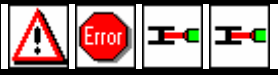
Fehlermeldungen/Betriebsanzeigen Beisler 100-68
Error massages/Operation display Beisler 100-68

Für DAC3 Programm-Version V0.50, Datum 21.05.07
For DAC3 program-version VO.50, Datum 21.05.07

Error / Info	Anzeige / Display	Bedeutung / Meaning	Abhilfe / Remedy
Nähmotor / Sewing motor			
Error 1051		Nähmotor Timeout • Kabel zum Nähmotor-Referenzschalter defekt • Referenzschalter defekt • Oberteil ist zu schwergängig oder hat eine zu hohe Riemenspannung	• Kabel austauschen • Referenzschalter austauschen • Oberteil auf Schwergängigkeit und Riemenspannung überprüfen
		Sewing motor timeout • Faulty cable to the sewing motor reference switch • Faulty reference switch	• Replace the cable • Replace the reference switch
Error 1052		Nähmotor Überstrom • Nähmotorkabel defekt • Nähmotor defekt • Steuerung defekt	• Nähmotorkabel austauschen • Nähmotor austauschen • Steuerung austauschen
		Sewing motor excess current • Faulty sewing motor cable • Faulty sewing motor • Faulty control	• Replace the sewing motor cable • Replace the sewing motor • Replace the control
Error 1053		Nähmotor Netzspannung zu hoch	• Netzspannug überprüfen
		Too high mains voltage	• Check the mains voltage
Error 1055		Nähmotor Überlast • Nähmotor blockiert schwergängig • Nähmotor defekt • Steuerung defekt	• Blockierung / Schwergängigkeit beheben • Nähmotor austauschen • Steuerung austauschen
		Sewing motor overload • Sewing motor blocked / sluggish • Faulty sewing motor • Faulty control	• Eliminate the blocking / sluggishness • Replace the sewing motor • Replace the control
Error 1056		Nähmotor Übertemperatur • Nähmotor schwergängig • Nähmotor defekt • Steuerung defekt	• Schwergängigkeit beheben • Nähmotor austauschen • Steuerung austauschen
		Sewing motor overheat • Sewing motor sluggish • Faulty sewing motor • Faulty control	• Eliminate sluggishness • Replace sewing motor • Replace control
Error 1058		• Nähmotor Drehzahl • Nähmotor defekt	• Nähmotor austauschen
		• Sewing motor speed • Faulty Sewing motor	• Replace sewing motor

Error 1302		Nähmotorfehler • Steuerung bekommt keine Impulse vom Impulsgeber im Motor	• Kabel vom Impulsgeber im Motor bis zur Steuerung überprüfen
		Sewing motor error • Control receives no impulse from the impulse transmitter in the motor	• Check the cable from the impulse transmitter in the motor to the control
Error 1342 - 1344		Nähmotorfehler • Interner Fehler	• Maschine aus- und wieder einschalten • Softwareupdate • Rückmeldung an DA oder Beisler Service
		Sewing motor error • Internal error	• Switch the machine off/on again • Software update • Inform the DA or Beisler Service
Schrittmotore / Stepping motors			
Error 2101		Schrittmotor Transportklammer Timeout Referenzierung • Kabel zum Referenzschalter defekt • Referenzschalter defekt	Kabel austauschen • Referenzschalter austauschen
		Step motor X-axis timeout reference • Faulty cable to the reference switch • Faulty reference switch	• Replace cable • Replace reference switch
Error 2103		Schrittmotor Transportklammer hat Schrittverluste	• Transportklammer auf Schwergängigkeit prüfen
		Step motor feed clamps has step loss	• Check sluggishness of the feed clamp
Error 2152		Schrittmotor Transportklammer überstromt	• Schrittmotor Transportklammer austauschen • Steuerung austauschen
		Step motor X-axis excess current	• Replace step motor X-axis • Replace control
Error 2153		Schrittmotor Transportklammer Überspannung • Netzspannung zu hoch	• Netzspannung prüfen
		Step motor X-axis excess voltage • Too high mains voltage	• Check the mains voltage
Error 2156		Schrittmotor Transportklammer Übertemperatur • Schrittmotor Transportklammer schwergängig • Schrittmotor Transportklammer defekt • Steuerung defekt	• Schwergängigkeit beseitigen • Schrittmotor Transportklammer austauschen • Steuerung austauschen
		Step motor X-axis overheat • Step motor sluggish • Faulty Stepp motor X-axis • Faulty control	• Eliminate sluggishness • Replace step motor X-axis • Replace control

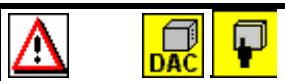
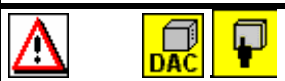
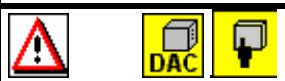
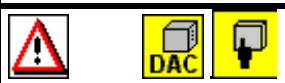
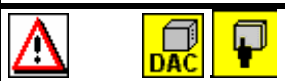
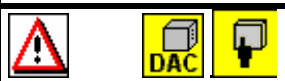
Error 2201		Schrittmotor Eckenmesserbock Timeout Referenzierung • Kabel zum Referenzschalter defekt • Referenzschalter defekt	• Kabel austauschen • Referenzschalter austauschen
		Step moro X-axis timeout reference • Faulty cable to the reference switch • Faulty reference switch	• Replace cable • Replace reference switch
Error 2253		Schrittmotor Eckenmesserbock Überspannung • Netzspannung zu hoch	• Netzspannung prüfen
		Step motor Y-axis excess voltage • Too high mains voltage	• Check the mains voltage
Error 2256		Schrittmotor Eckenmesserbock Übertemperatur • Schrittmotor Eckenmesserbock schwergängig • Schrittmotor Eckenmesserbock defekt • Steuerung defekt	• Schwergängigkeit beseitigen • Schrittmotor Eckenmesserbock austauschen • Steuerung austauschen
		Step motor Y-axis overheat • Step motor Y-axis sluggish • Faulty step motor Y-axis • Faulty control	• Eliminate sluggishness • Replace step motor Y-axis • Replace control
Error 2353		Schrittmotor Bandzuführer Überspannung • Netzspannung zu hoch	• Netzspannung prüfen
		Step motor Z-axis excess voltage • Too high mains voltage	• Check the mains voltage
Error 2356		Schrittmotor Bandzuführer Übertemperatur • Schrittmotor Bandzuführer schwergängig • Schrittmotor Bandzuführer defekt • Steuerung defekt	• Schwergängigkeit beseitigen • Schrittmotor Bandzuführer austauschen • Steuerung austauschen
		Step motor Z-axis overheat • Step motor Z-axis sluggish • Faulty step motor Z-axis • Faulty control	• Eliminate sluggishness • Replace step motor Z-axis • Replace control
Error 2401		Fehler Schrittmotor Eckenmesser Nahtanfang	• Kabel zum Referenzschalter defekt • Referenzschalter defekt • Motor defekt, schwergängig
		Error Stepping motor corner knives seam beginning	• Faulty cable to the reference switch • Faulty reference switch • Faulty stepping motor, sluggish

Error 2501	Fehler Schrittmotor Eckenmesser Nahtende	• Kabel zum Referenzschalter defekt • Referenzschalter defekt • Motor defekt, schwergängig
	Error stepping motor corner knives seam end	• Faulty cable to the reference switch • Faulty reference switch • Faulty stepping motor, sluggish
Steuerung/Maschine / Control/machine		
Error 3100	Maschine Steuerspannung • Kurzzeitiger Netzspannungseinbruch	• Netzspannung überprüfen
	Machine control voltage • Temporary mains voltage drop	• Check the mains voltage
Error 3102	Maschine Spannung Nähmotor • Kurzzeitiger Netzspannungseinbruch	• Netzspannung überprüfen
	Machine voltage sewing motor • Temporary mains voltage drop	• Check the mains voltage
Error 3103	Maschine Spannung Schrittmotoren • Kurzzeitiger Netzspannungseinbruch	• Netzspannung überprüfen
	Machine voltage step motors • Temporary mains voltage drop	• Check the mains voltage
Error 3107	Maschine Temperatur • Lüftungsöffnungen verschlossen • Lüftungsgitter verschmutzt	• Lüftungsöffnungen überprüfen • Lüftungsgitter reinigen
	Machine Temperature • Vent holes closed • Ventilation grid soiled	• Check the vent holes • Clean the ventilation grid
Error 3121	Druckluft fehlt, nicht ausreichend	• Druckluft aufdrehen, stabilisieren
	Lack of compressed-air, insufficient	• Turn up compressed air, stabilizing
Error 3210	Faden gerissen	• Faden wieder einfädeln
	Thread breakage	• Rethread
Error 3215	Leere Spule (Restfadenzählung)	• Volle Spule einsetzen
	Empty bobbin (Bobbin control)	• Insert full bobbin
Error 3220 	Leere Spule (Restfadenzählung)	• Volle Spule einsetzen
	Empty bobbin (Bobbin control)	• Insert full bobbin

Error 3500 - 3507 3520 - 3530 3540 3545 3721 3722		Fehler Kommando-Interpreter / Motorsynchronisation • Interner Fehler	• Maschine aus- und wieder einschalten • Softwareupdate • Rückmeldung an DA oder Beisler Service
		Error command interpreter / motor synchronization • Internal error	• Switch the machine off/on again • Software update • Inform the DA or Beisler Service
Error 6551 - 6554 6651 - 6653 6751 - 6761		Fehler Oberteilposition / AD-Konverter / Prozessorfehler • Interner Fehler	• Maschine aus- und wieder einschalten • Softwareupdate • Rückmeldung an DA oder Beisler Service
		Error machine head position / AD-converter / processor error • Internal error	• Switch the machine off/on again • Software update • Inform the DA or Beisler Service
Error 6952		Fehler Schrittmotortreiber • Interner Fehler	• Maschine aus- und wieder einschalten • Softwareupdate • Rückmeldung an DA oder Beisler Service
		Error step motor driver • Internal error	• Switch the machine off/on again • Software update • Inform the DA or Beisler Service

Kommunikation / Communication			
Error 7200		Fehler bei CAN – Modul Messerbockeinheit • Kein Modul an der Adresse erkannt	• Kabel, Jumper, Spannungsversorgung überprüfen
		Failure in CAN-module Corner knife unit • No module recognized at address	• Check the cable, jumper, power supply
Error 7201		Fehler bei CAN – Modul Messerbockeinheit • Spannungsverlust	• Kabel, Jumper, Spannungsversorgung überprüfen
		Failure in CAN-module Corner knife unit • Power-failure	• Check the cable, jumper, power supply
Error 7202		Fehler bei CAN – Modul Messerbockeinheit • Zu hohe Temperatur an der SM-Endstufe	• Kabel, Jumper, Spannungsversorgung, Endstufe und Motoren überprüfen
		Failure in CAN-modules Corner knife unit • Too high temperature on the SM-output	• Check the cable, jumper, power supply, output and motor
Error 7209		Fehler bei CAN – Modul Messerbockeinheit • Falsches Modul an der Adresse erkannt	• Jumper/DIP-Schalter überprüfen
		Failure in CAN-modules Corner knife unit • Wrong module recognized at address	• Check the jumper/DIP-switch
Error 7210		Fehler bei CAN – Modul I/O-Einheit (Modul 64A/48E) • Kein Modul an der Adresse erkannt	• Kabel, Jumper, Spannungsversorgung überprüfen
		Failure in CAN-module I/O unit (module 64A/48E) • No module recognized at address	• Check the cable, jumper, power supply
Error 7211		Fehler bei CAN – Modul I/O-Einheit (Modul 64A/48E) • Spannungsverlust	• Kabel, Jumper, Spannungsversorgung überprüfen
		Failure in CAN-module I/O unit (module 64A/48E) • Power-failure	• Check the cable, jumper, power supply
Error 7215		Fehler bei CAN – Modul I/O-Einheit (Modul 64A/48E) • Ausgänge Überlast/Kurzschluss	• Ausgangskabel/-stecker überprüfen
		Failure in CAN-module I/O unit (module 64A/48E) • Output overload / shortage	• Check output cable / plug
Error 7219		Fehler bei CAN – Modul I/O-Einheit (Modul 64A/48E) • Falsches Modul an der Adresse erkannt	• Jumper/DIP-Schalter überprüfen
		Failure in CAN-module I/O unit (modul 64A/48E) • Wrong module recognized at address	• Check the jumper/DIP-switch
Error 7260		Allgemeiner Fehler bei CAN – Modulen	• Kabel überprüfen
		General failure in the CAN-modules	• Check cable

Error 7801		Kommunikation Bedienfeldschnittstelle • Leitungsstörung • Kabel Bedienfeldschnittstelle defekt • kein Programm auf der DAC3-Steuerung	• Störquelle ausschalten • Kabel austauschen • DAC3-Update
		Communication Control panel interface • Cable interference • Faulty cable to the control panel interface • No porgamm on the DAC3-control	• Eliminate disturbance source • Replace the cable • DAC3-update
Error 8151 8156 - 8159		Fehler IDMA • Störung • Steuerung defekt	• Maschine aus- und wieder einschalten • Steuerung austauschen
		IDMA error • Failure • Faulty control	• Switch the machine off/on again • Replace the control
Error 8152 - 8154		Fehler IDMA • Interner Fehler	• Maschine aus- und wieder einschalten • Softwareupdate • Rückmeldung an DA oder Beisler Service
		IDMA error • Internal error	• Switch the machine off/on again • Software update • Inform the DA or Beisler Service
Error 8151 8155		Fehler ADSP-Booten / Xilinx-Booten / Booten • Interner Fehler	• Maschine aus- und wieder einschalten • Softwareupdate • Rückmeldung an DA oder Beisler Service
		Error booting ADSP / Booting Xilinx / Booting • Internal error	• Switch the machine off/on again • Software update • Inform the DA or Beisler Service
Error 8252 8257 8258 - 8256 8254		ADSP-Booten / Xilinx-Booten / Booten • Störung	• Maschine aus- und wieder einschalten
		Booting ADSP / Booting Xilinx / Booting • Failure	• Switch the machine off/on again
Error 8351		Fehler Testpins	• Maschine aus- und wieder einschalten • Softwareupdate • Rückmeldung an DA oder Beisler Service
		Error testpins	• Switch the machine off/on again • Software update • Inform the DA or Beisler Service

Info 8400		Bedienfeld hat kein gültiges Programm für die DAC. Control panel has invalid program for DAC	• Aktuelles Programm mit USB-Stick ins Bedienfeld laden. • Load actual software from USB-stick into control panel
Info 8401 **8402**		Bedienfeld hat kein gültiges Programm für die DAC. Control panel has invalid program for DAC	• Aktuelles Programm mit USB-Stick ins Bedienfeld laden. • Load actual program from USB-stick into the control panel
Info 8403		Programm in der DAC ist nicht mehr aktuell. Program on DAC is not up-to-date	• Aktuelles Programm in die DAC laden • Update with latest program version
Info 8404 **-** **8407**		Update der DAC war fehlerhaft. Faulty update on DAC	• Erneuter Update Versuch • Überprüfung Kabelverbindung • DAC austauschen • Start update again • Check cable connections • Change DAC
Info 8408		Warten auf Reset durch die DAC. Waiting for reset through DAC	• Warten bis Neustart durchgeführt (Dauer einige Sekunden) • Wait until rest is accomplished (duration approx. 30 sec.)
Info 8411		Überprüfung des Programms der DAC aktiv. DAC program check active	• Warten bis Überprüfung durchgeführt (Dauer ca. 30 Sekunden) • Wait until rest is accomplished (duration approx. 30 sec.)
Info 8414		Update der DAC war erfolgreich. Successful update of DAC	
Error 8801 **-** **8805** **8806** **8890** **8891**		Fehler Testpins / Signal- / Ereignisbearbeitung / Memory-Wrapper / Liste Funktionen • Interner Fehler Error Testpins / Signals / Event processing / Memory wrapper / List of functions • Internal error	• Maschine aus- und wieder einschalten • Softwareupdate • Rückmeldung an DA oder Beisler Service • Switch the machine off/on again • Software update • Inform the DA or Beisler Service

System / system			
Info 9000		Referenzfahrt aktiv	
		Reminder to execute the reference run after switching on	• Push left pedal backwards
Info 9001		Eckenmesserstation ist ausgeschwenkt	• Eckenmesserstation einschwenken
		Corner-knife station is swivelled out	• Swivel corner-knife station in
Error 9001		Eckenmesserstation ist während des Nähablaufs ausgeschwenkt. Reset Pedal betätigen, anschliessend fährt der Transportschlitten nach hinten und starten mit dem Ablauf.	• Eckenmesserstation - Befestigung überprüfen/einstellen
		Corner-knife station swivelled out during sewing. Push the left pedal backwards: the feed carriages moves backwards and a reference run is executed	• Check/adjust corner-knife station locking device
Info 9002		Faltstation ist ausgeschwenkt	• Faltstation einschwenken
		Folder station is swivelled out	• Swivel folder station in
Error 9002		Faltstation ist während des Nähablaufs ausgeschwenkt. Reset Pedal betätigen, anschliessend fährt der Transportschlitten nach hinten und starten mit dem Ablauf	• Faltstation – Befestigung überprüfen/einstellen
		Folder station swivelled out during sewing. Push the left pedal backwards: the feed carriage moves backwards and a reference run is executed	• Check/adjust the fastening of the folder station
Info 9003		Falsche Nadelstellung	• Handrad manuell in Fadenhebelhochstellung drehen
		Wrong needle position	• Turn thread take-up lever in upper position
Error 9005		Warten auf Reset	• Betätigen des Reset-Schalters
		Waiting for reset	• Push reset button
Error 9006		Reset-Schalter ist betätigt	• Lösen des Reset-Schalters
		Reset-switch is activated	• Unlock reset button
Info 9007		Einstellprogramm aktiv	• Fortsetzen des Ablaufs nach Betätigung des Start-Pedals.
		Setting programm is active	• Resume of downpipe after actuation of start pedal

Info 9013		Band fehlt	• Band einlegen
		Tape missing	• Insert tape
Info 9016		Naht nicht aktiv	• Naht auswählen • anderes Nahtprogramm wählen
		Seam inactive	• Select seam • Select other seam program
Error 9601		Reset Pedal wurde während des Nähablaufes betätigt	• Zum Auflösen muss das Reset-Pedal noch einmal betätigt werden. Transportklammer fährt anschliessend in die hintere Position
		Left pedal pushed backwards during sewing	• To clear this error, operate the pedal again; the feed clamp then moves to its rear position
Info 9604		Lichtschranke (S10) für Nähgutentnahme nicht aktiv	• Lichtschranke (S10) für Nähgutentnahme einstellen
		Light barrier (s10) for material removal not active	• Adjust the light barrier (s10) for material removal
Error 9700		Faltstempel nicht oben	• Einstellung Faltstempel korrigieren (mechanische Kollision; Schalter überprüfen)
		Folder not up	• Correct the folder setting (mechanical impact; check switch S17)
Error 9701		Faltstempel nicht unten	• Einstellung Faltstempel korrigieren (mechanische Kollision; Schalter prüfen)
		Folder not down	• Correct the folder setting (mechanical impact; check switch S17)
Error 9705		Eckenmesser Nahtanfang nicht unten	• Einstellung Eckenmesser Nahtanfang korrigieren (mechanische Kollision; Schalter prüfen)
		Corner knives seam beginning not down	• Correct adjustment of corner knives “seam start” (mechanical collision, check switch)
Error 9706		Eckenmesser Nahtende nicht unten	• Einstellung Eckenmesser Nahtende korrigieren (mechanische Kollision; Schalter prüfen)
		Corner knives seam end not down	• Correct adjustment of corner knives “seam end” (mechanical collision, check switch)
Error 9707		Reissverschlussschere nicht unten	• Einstellung Reissverschlussschere korrigieren (mechanische Kollision; Schalter prüfen)
		Zipper scissors not down	• Correct adjustment of zipper cutting scissors • (mechanical collision, check switch)
Error 9708		Reissverschlussschere nicht oben	• Einstellung Reissverschlussschere korrigieren (mechanische Kollision; Schalter prüfen)
		Zipper scissors not up	• Correct adjustment of zipper cutting scissors (mechanical collision, check switch)
Error 9709		Stempel (Niederhalter) nicht oben	• Einstellung Stempel (Niederhalter) korrigieren (mechanische Kollision; Schalter prüfen)
		Downholder not up	• Check adjustment of piston (downholder)

Error 9710		Sensor Klammer vorn (S5) nicht erreicht	• Einstellung Sensor Klammer vorn korrigieren (mechanische Kollision; Schalter prüfen)
		Limit switch for feed clamp active	• Check material feed and limit switch S101
Info 9720		Fehler bei der Pattenabtastung mit Lichtschranke	• Reflexfolie kontrollieren; Ausrichtung der Lichtschranken prüfen
		Error at the light barrier for flap scanning	• Check the reflecting foil; check the alignment of the light barriers
Info 9721		Patte wurde vor dem vorderen Anlegepunkt angelegt	• Patte korrekt einlegen
		Flap has been positioned in front of the front positioning point	• Position the flap correctly
Info 9722		Patte liegt über den maximalen Nähbereich hinaus (hinter dem hinteren Anlegepunkt)	• Pattengröße kontrollieren; Patte korrekt einlegen
		Flap protrudes from the maximum sewing area (behind the rear positioning point)	• Check the flap size; position the flap correctly
Info 9723		Flusen am Pattenanfang	• Patten mit glatten Kanten einlegen; Reflexfolie kontrollieren
		Fluff at the flap beginning	• Feed flaps with smooth edges; check the reflecting foil
Info 9726		Patte zu groß oder Reflexfolie verschmutzt bzw. defekt	• Pattengröße und Reflexfolie kontrollieren
		Flap too large or reflecting foil dirty or faulty	• Check the flap size and reflecting foil
Info 9727		Anhaltestrecke für die Pattenschräge nicht ausreichend	• Einschubgeschwindigkeit verringern
		Stop section insufficient fort he flap angle	• Reduce the slide-in speed
Info 9800		Mittelmesser nicht betriebsbereit	• Kabel überprüfen
		Center knife not ready for use	• Check cable
Info 9810		Ausroller nicht betriebsbereit	• Kabel überprüfen
		Smoother not ready for use	• Check cable
Error 9900		Defekte Maschinenparameter (Checksummenfehler)	• Maschinenparameter neu initialisieren (Service); • Maschinenparameter einstellen oder vom USB-Stick einlesen
		Defective machine parameters (Checksum error)	• Re-initialize machine parameters (test program); • Set machine parameters or read them from the dongle
Error 9901		Defekte Taschenfolgen (Checksummenfehler)	• Taschenfolgen neu initialisieren (Service); • Taschenfolgen einstellen oder vom USB-Stick einlesen
		Defective pocket sequences (Checksum error)	• Re-initialize pocket sequences (test program); • Set pocket sequences or read them from the dongle

Error 9902		Defekte Taschenprogramme (Checksummenfehler)	• defekte Taschenprogramme initialisieren (Service); • Taschenprogramme einstellen oder vom USB-Stick einlesen
		Defective pocket programs (Checksum error)	• Re-initialize the defective pocket programs (test program); • Set pocket programs or read them from the dongle

* Bei häufigem Auftreten der Fehleranzeige mit dem Servicepersonal in Verbindung setzen.